Exploring the influence of media messaging on sleep during pregnancy: An interview study.

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Abstract

The influence of popular media on societal perceptions and practices of sleep, particularly during pivotal life stages such as pregnancy, pose a critical area of study due to the potential impact upon maternal health and wellbeing. Traditionally research has predominantly focused upon sleep deficits in pregnancy, particularly during the third trimester and the detrimental health consequences. However, there has been little research considering how sleep messages are disseminated through media discourses and received by pregnant women. This thesis explores how pregnant women both navigate and negotiate sleep discourses perpetuated by online media outlets, aiming to discern the interplay between media influences and internalised experiences. Furthermore, this thesis explores the wider social discourses which may affect pregnant women's agency and wellbeing across this unique life stage which influence experiences of sleep, and explicit sleep behaviours.

Semi-structured interviews were conducted with 11 participants who were currently pregnant with their first baby, were over 18 years of age, and residing in Aotearoa, New Zealand. Reflexive thematic analysis was utilised to analyse the data, and five significant themes were produced, including: disrupted sleep and loss of sleep agency, navigating sleep advice and online media content, internalised pressure and heightened responsibility for sleep health, commercialisation of sleep and the pressure to fix sleep problems, and lastly coping strategies and resistance to sleep messaging. The findings underscore the negative impacts deficit focused media outlets can have in perpetuating sleep discourses upon pregnant women and their internalised experiences of sleep. Subsequently, highlighting the importance of understanding wider discourses which influence women's agency and wellbeing during their pregnancy. Through critical examination of how women negotiate media representations of sleep in pregnancy, this

research contributes insights into the existing literature on digital media and sleep practices. The conclusions drawn, emphasise the imperative for nuanced and supportive media narratives surrounding sleep in pregnancy. Such narratives are crucial in mitigating undue stress upon first time mothers and fostering empowerment among pregnant women to effectively manage their own sleep health.

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Terms and Abbreviations

Term	Definition
AoNZ	Aotearoa, New Zealand.
EEG	Electroencephalography; a method of recording electrical activity in the brain.
Karakia	Incantation or prayer, often used to invoke spiritual guidance or protection.
Mana	Spiritual power or authority embodied within a person or group.
NREM	Non-rapid eye movement sleep; a sleep phase associated with restorative rest.
REM	Rapid eye movement sleep; a sleep phase associated with dreaming and memory.
SHY	Synaptic homeostasis hypothesis
Te Tiriti o Waitangi	The Treaty of Waitangi; the foundational agreement between Māori and the Crown.
Tino rangatiratanga	Self-determination; a principle asserting Māori sovereignty and authority.
Tikanga	Māori cultural customs, protocols, and behavioural guidelines.

Whanaungatanga	Relationships, kinship, and a sense of connection between people.

Chapter One:

Introduction

> "Do but consider what an excellent thing sleep is...that golden chain that ties health and our bodies together" (Dekker, 1969).

Sleep is a vital tenet of health and wellbeing, occupying approximately one third of an individual's life and playing a critical role in the regulation of physiological and psychological processes (Kumar, 2008). Disruptions to sleep, whether in quality or quantity have been consistently linked to a range of adverse health outcomes, including heightened risk for cardiovascular disease, metabolic dysfunction, perinatal depression, and impaired cognitive functioning (Kumar, 2008; Kyle & Henry, 2017). Despite its essential role, sleep remains an undervalued and often moralised behaviour, shaped by contemporary discourses of productivity, self-optimisation, and personal responsibility (Lafontaine & Sims, 2020; Williams, 2011).

Contemporary societies are increasingly saturated with messages about sleep, shaped by the rapid growth of digital and social media. Across platforms such as Instagram, TikTok, Facebook, and digital news outlets, representations of 'good' sleep practices are constructed and circulated. As such, these digital media representations of sleep often use medicalised terminology, lifestyle branding, and expert authority (Sikka, 2021; Williams et al., 2013). These media channels not only disseminate information but also actively prescribe and construct the social norms that define what is considered acceptable sleep behaviour. Particularly within the context of the wellness industry, sleep is increasingly positioned as a commodity to be managed, tracked, and perfected, using technological aids and consumer products (Sikka 2021; Williams et al., 2013). Subsequently this environment fosters heightened public awareness, but often anxiety and self-surveillance, especially in relation to

sleep hygiene and perceived sleep deficits. Pregnant women, in particular, occupy a uniquely scrutinised position within this discourse. As both subjects of increased health monitoring and targets of cultural expectations, they are frequently burdened with the intensified responsibility of ensuring optimal sleep. Accordingly, this intensified responsibility extends beyond their own health, but also for the wellbeing of their developing baby (Tomiyama, 2019; Santiago et al., 2001). Yet achieving this ideal is often increasingly difficult as pregnancy progresses and pregnant women's comfort decreases (Ladyman et al., 2022).

Pregnancy introduces a range of physiological, emotional, and environmental challenges that can significantly disrupt sleep. Pregnancy is widely regarded as a state requiring careful management, with maternal behaviours, particularly those related to health, being subject to increased observation and judgement (Ladyman et al., 2022). Sleep, in this context, is constructed not only as a matter of maternal wellbeing but also as a moral imperative tied to foetal development and future child outcomes (Tomiyama, 2019). As a result, pregnant women are often tasked with the dual burden of monitoring their sleep both for their own sake and for that of their unborn child. The dual monitoring reflects broader ideologies of intensive mothering and maternal responsibilities (Hays, 1996; Santiago et al., 2001; Williams, 2011). These discourses are reinforced through both clinical advice and media messaging, which frequently emphasise the risks associated with poor sleep in pregnancy, including preterm birth, gestational hypertension, low birth weight, and postnatal mood disorders (Facco et al., 2010).

Yet, the achievement of 'ideal' sleep during pregnancy is often compromised by the very nature of the gestational experience. Hormonal fluctuations, increased physical discomfort, frequent urination, and emotional stressors are all common features of pregnancy that can profoundly disrupt sleep quality and routines. The dissonance between the

expectation to attain optimal sleep and the embodied reality of disrupted rest can produce feelings of guilt, failure, and anxiety (Ladyman et al., 2022). Moreover, many of the strategies promoted through commercial or medical channels to manage pregnancy-related sleep issues may be inaccessible, unaffordable, or ineffective (Okun et al., 2014). Barriers to accessing sleep commodities are further compounded when factors such as socioeconomic conditions, work schedules, or housing instability are at play (Okun et al., 2014; Silva-Pérez et al., 2019).

Despite the proliferation of messages surrounding sleep during pregnancy, there remains a significant gap in the literature regarding how pregnant women themselves make sense of, interpret, and navigate these messages. Most existing research on pregnancy and sleep has taken a clinical or biomedical approach, prioritising quantitative assessments of sleep architecture, circadian rhythm disruption, and associated health risks (Facco et al., 2010; Santiago et al., 2001). While such studies are valuable, they often neglect the subjective, lived dimensions of sleep in pregnancy, including how sleep is felt, managed, and narrated within the everyday lives of pregnant women. Equally, few studies examine how digital and media landscapes influence these lived experiences and contribute to shaping expectations, anxieties, and practices around rest.

This thesis aims to address this gap by exploring the lived experiences of first-time pregnant women as they navigate sleep during pregnancy, within a media saturated environment. Through a qualitative lens, it examines how discourses of sleep health are internalised, resisted, or reinterpreted by women during this transitional period. Furthermore, it foregrounds the complexities of embodied experiences within sociocultural contexts that new mothers live in. The study is situated within a critical feminist framework that views sleep not merely as a biological necessity but as an embodied and socially constructed

phenomenon. This approach emphasises how cultural narratives, gendered expectations, and power relations shape the ways pregnant women experience and understand sleep. Drawing on feminist theories of maternal subjectivity and embodiment (Hays, 1996; Lupton, 2012), the research interrogates how dominant discourses, particularly neoliberal ideals of self-responsibility and intensive mothering, mediate pregnant women's relationships with their sleep and digital media. Such frameworks reveal that sleep during pregnancy is embedded in a matrix of moral regulation and surveillance, where bodily functions are scrutinised as indicators of maternal virtue and foetal wellbeing. This sociocultural lens challenges reductionist biomedical models, calling attention to the emotional labour and politics involved in navigating these competing demands.

Simultaneously, this thesis engages with emerging scholarship on digital media's role in health communication and identity formation. The omnipresence of social media and digital platforms has transformed how health knowledge is produced, disseminated, and consumed. Through this influx of digital use complex ecosystems are created, where expert advice, peer narratives, commercial interests, and popular culture all intersect (Sikka, 2021). Pregnant women are active participants within these media ecologies, negotiating and contesting meanings of 'good' sleep amid conflicting and often commodified messages. By situating pregnant women as both consumers and co-creators of health discourse, this research highlights the ambivalent power of digital media. As digital media simultaneously enables access to supportive communities and exacerbates anxieties through moralising and commercial pressures. Such dynamics warrant critical examination to understand how digital media shapes embodied experiences and health practices in pregnancy within current society.

Finally, the significance of this research lies in its potential to inform more holistic and contextually sensitive approaches to maternal health promotion. By centring pregnant

women's voices and lived experiences, the study offers valuable insights into the affective and cultural dimensions of sleep, which are often overlooked in clinical practice and public health messaging. This research advocates for antenatal care and health communication strategies that acknowledge the complex realities of pregnancy, including the emotional labour involved in managing sleep within socio-economic and media environments. It also highlights the importance of resisting one-size-fits-all prescriptions, encouraging interventions that empower pregnant women to navigate sleep health in ways that align with their embodied needs and diverse socio-cultural contexts. Ultimately, the study contributes to a broader movement toward reproductive justice, seeking to challenge dominant health narratives and support equitable maternal wellbeing.

Chapter Two:

Literature Review

This literature review provides a critical synthesis of interdisciplinary scholarship on sleep, with a specific focus on its change during pregnancy and the ways it is represented in media discourses. The review begins by outlining the biological and neurocognitive foundations of sleep, including sleep architecture and the physiological changes that occur across the life course. Moving into the multidimensional benefits of sleep health, it then considers the implications of sleep deprivation for mental, physical, and perinatal health. Followed by highlighting the bidirectional relationships between sleep and conditions such as depression and gestational complications. The review moves beyond individual-level accounts by incorporating socioecological frameworks, which contextualise sleep within broader systems of inequality, including gender, ethnicity, and socioeconomic status particularly in AoNZ. Subsequently, attention is given to the discursive construction of sleep in contemporary media, exploring how public narratives shape expectations around sleep, especially for pregnant women. Emerging research on media sensationalism, wellness culture, and maternal responsibility is reviewed, alongside studies investigating audience engagement with sleep-related content. Finally, the chapter identifies a gap in empirical research concerning how pregnant women interpret and negotiate these mediated messages about sleep. In doing so, it positions the present thesis within critical feminist and health psychology underpinnings, aiming to interrogate the entanglements between media, health discourse, and lived maternal experience in AoNZ.

Defining Sleep

Sleep can be defined as a regulated physiological behavioural state characterised by altered consciousness and reduced sensory responsiveness, distinguishable from wakefulness (Kyle & Henry, 2017). As both a biological necessity and behavioural

phenomenon, sleep is governed by intricate neurobiological mechanisms involving circadian rhythms, homeostatic processes, and interactions between cortical and subcortical brain regions. Sleep is both a complex and fundamental aspect of physiology and behaviour, and imperative for maintaining health and wellbeing (Kyle & Henry, 2017). Disruptions to sleep can impair cognitive performance, emotional regulation, immune functioning, and metabolic balance, underscoring its critical role in maintaining homeostasis and psychological wellbeing (Walker, 2017). Despite its ubiquity across species, the precise functions and subjective experience of sleep remain a focal point of interdisciplinary investigation, drawing from neuroscience, psychology, evolutionary biology, and public health.

Sleep functions

The functions of sleep have long intrigued researchers, with several theoretical frameworks offering complementary explanations. Evolutionary theories, such as the 'adaptive inactivity' hypothesis, argue that sleep evolved to provide survival advantages by conserving energy and reducing exposure to predators during vulnerable periods (Siegel, 2009). In contrast, restorative theories posit that sleep enables vital biological processes, including tissue repair, immune function regulation, and metabolic homeostasis (Xie et al., 2013). Neurocognitive theories are increasingly prominent and propose that sleep plays a critical role in maintaining brain function and psychological wellbeing. Current models, such as the synaptic homeostasis hypothesis (SHY), suggest that sleep, particularly slow-wave sleep, serves to downscale synaptic strength accumulated during wakefulness, thereby preserving neural efficiency and preventing cognitive overload (Tononi & Cirelli, 2014). Within this framework, sleep is hypothesised to facilitate essential processes in cognitive restoration, memory consolidation, and emotional regulation (Kyle & Henry, 2017).

Furthermore, evidence indicates that the glymphatic system becomes more active during sleep, promoting the clearance of neurotoxic waste products such as beta-amyloid, thus reinforcing the neuroprotective function of sleep (Xie et al., 2013). These theoretical models are not mutually exclusive; rather, they collectively underscore sleep's multifaceted role in sustaining physiological, neurological, and psychological health.

Sleep & sleep architecture

Sleep architecture refers to the organised and cyclical progression of sleep stages that occur throughout the night, alternating between non-rapid eye movement (NREM) and rapid eye movement (REM) sleep (Amlaner & Fuller, 2009). This architecture is typically visualised through polysomnography, a standardised method that measures electroencephalographic (EEG) activity, eye movements, muscle tone, heart rate, and respiratory patterns to map both the structure and quality of sleep (Amlaner & Fuller, 2009). NREM sleep is conventionally divided into three stages: N1, N2, and N3, which represent a continuum from light to deep sleep. Stage N1 is a transitional phase lasting only a few minutes, characterised by a shift from alpha to theta EEG activity, slowed eye movements, and decreased muscle tone (Amlaner & Fuller, 2009). This stage is easily disrupted, and individuals often do not report being asleep when awoken from N1. Stage N2, which comprises approximately 50% of total sleep time in healthy adults, is marked by the presence of sleep spindles and k-complexes, bursts of neural activity believed to protect sleep from external stimuli and facilitate memory consolidation (Amlaner & Fuller, 2009). Stage N3, also known as slow-wave sleep (SWS) or deep sleep, is dominated by high-amplitude, low-frequency delta waves. This stage is physiologically restorative and associated with processes such as growth hormone release, immune regulation, tissue repair, and the downscaling of synaptic activity to promote neural efficiency (Brown et al., 2012; Tononi & Cirelli, 2014).

In contrast, REM sleep is defined by desynchronised EEG activity similar to wakefulness, rapid eye movements, vivid dreaming, and muscle atonia, a state of near-complete skeletal muscle paralysis that prevents the physical enactment of dreams (Berry et al., 2020; Sullivan et al., 2022). REM sleep is also associated with heightened brain oxygen consumption, irregular heart rates, irregular respiratory rates, and activation of emotion-related brain regions such as the amygdala. Importantly, whereas NREM (especially stage N3) is most prominent in the first half of the night and plays a key role in somatic restoration and declarative memory consolidation. REM sleep tends to lengthen in duration as the night progresses and is implicated in procedural learning, emotional processing, and creative problem-solving (Diekelmann & Born, 2010). Across a typical night, these stages cycle approximately every 90 to 120 minutes in a predictable pattern that reflects both homeostatic sleep pressure and circadian timing. This dynamic architecture is central to achieving restorative sleep, with the balance between NREM and REM playing complementary roles in maintaining physiological and psychological health.

During pregnancy, however, sleep architecture is often significantly disrupted due to hormonal fluctuations particularly increases in progesterone, estrogen, and prolactin (Facco et al., 2010). Such fluctuations exert sedative effects early in pregnancy but may also contribute to sleep fragmentation, vivid dreams, and increased nocturnal awakenings as gestation progresses (Facco et al., 2010). Polysomnographic studies show that N3 sleep often declines in the third trimester, and REM sleep becomes shorter and more fragmented, particularly in the later stages of pregnancy (Facco et al., 2010). This is compounded by physiological discomforts such as musculoskeletal strain, frequent urination, gastroesophageal reflux, and foetal movements. All of which increase the likelihood of micro-arousals, or brief shifts to lighter stages of sleep (Facco et al., 2010). While many of these awakenings are not consciously remembered, their cumulative effect

can significantly impair the continuity and perceived quality of sleep. As such, contributing to daytime fatigue, mood disturbances, and reduced cognitive functioning (Sullivan et al., 2022). These changes illustrate how sleep in pregnancy is not only shaped by neurobiological and hormonal factors but also by embodied, psychosocial, and environmental conditions. The disruption of sleep architecture during pregnancy represents both a physiological adaptation and a source of strain, raising important questions about how sleep is managed, medicalised, and socially constructed during the perinatal period.

Sleep health

Sleep health is a multidimensional construct encompassing not only adequate duration but also quality, timing, regularity, and continuity of sleep. It is increasingly recognised as a vital component of physical, cognitive, and emotional wellbeing, rather than merely the absence of sleep disorders (Watson et al., 2015). Optimal sleep health includes a consistent sleep–wake schedule, high sleep efficiency, minimal nocturnal awakenings, and sufficient proportions of both NREM and REM stages (Diekelmann & Born, 2010). Adequate amounts of NREM and REM sleep play distinct roles in memory consolidation, emotional regulation, metabolic balance, and cellular repair (Diekelmann & Born, 2010; Walker, 2017). Physiologically, restorative sleep supports immune competence by enhancing the production of cytokines and promoting adaptive immune responses, thereby reducing susceptibility to infections and facilitating recovery from illness (Besedovsky et al., 2012). Additionally, sufficient sleep is essential for metabolic regulation, with robust evidence linking good sleep health to improved insulin sensitivity, appetite regulation, and cardiovascular function (Spiegel et al., 2009).

Moreover, positive sleep health is strongly associated with emotional regulation and psychological resilience (Spiegel et al., 2009). Sleep facilitates the recalibration of neural circuits involved in mood and stress responses, including the prefrontal cortex and amygdala, thereby buffering against the development of anxiety, depression, and affective dysregulation (Su & He, 2023). Regular and high-quality sleep also contributes to subjective wellbeing and quality of life, with individuals reporting greater life satisfaction, improved interpersonal relationships, and higher overall functioning when their sleep needs are met (Su & He, 2023). Importantly, these benefits extend to vulnerable populations such as pregnant individuals, where maintaining good sleep health supports not only maternal psychological wellbeing but also positive birth outcomes and infant development (Okun, 2016). These multidimensional advantages of sleep health highlight the imperative to prioritise sleep in both clinical practice and public health policy, positioning it as a critical target for interventions aimed at enhancing holistic health and reducing disease burden.

The detrimental effects of poor sleep & sleep deprivation

Acute sleep deprivation has been consistently linked to impairments across a wide range of cognitive and physiological domains (Kyle & Henry, 2017). In particular, it has been shown to disrupt core cognitive processes, including executive functioning, attentional control, working memory, and the consolidation of new information (Kyle & Henry, 2017). These impairments can undermine an individual's capacity for effective decision-making, emotional regulation, and adaptive problem-solving (Kyle & Henry, 2017). Importantly, the impact of sleep loss is not limited to neurocognitive outcomes; rather, it extends to systemic physiological consequences. Research indicates that insufficient sleep contributes to dysregulation within the immune and metabolic systems, compromises psychological wellbeing, and increases the risk of cardiovascular dysfunction (Kyle & Henry, 2017). These effects include reduced immune responsiveness,

altered glucose metabolism, heightened emotional reactivity, and elevated blood pressure, each of which have implications for both acute and chronic health outcomes. Taken together, these findings underscore the essential role of sleep in sustaining optimal cognitive performance and maintaining physiological homeostasis, reinforcing its status as a foundational component of overall health (Kyle & Henry, 2017).

Poor sleep quality and chronic sleep deprivation have been consistently linked to an increased risk of depression and higher all-cause mortality across global populations (Paine et al., 2016). Large-scale epidemiological studies have demonstrated that the detrimental impact of insufficient sleep extends well beyond temporary cognitive or emotional disturbances, instead contributing to broader patterns of morbidity and premature mortality (Irwin, 2015; Paine et al., 2016). Sleep is now widely recognised as a key pillar of health, integral not only to physiological restoration but also to affect regulation and emotional resilience. One particularly well-established relationship is that between insomnia and depression, with compelling longitudinal data suggesting that chronic insomnia significantly elevates the risk of future depressive episodes (Irwin, 2015). For example, Irwin (2015) found that individuals with persistent insomnia were approximately fourteen times more likely to develop depression within a year of diagnosis, positioning sleep disturbance as a powerful predictor of mood disorders. This relationship may be partially explained by neuroimmune mechanisms (Eisenberger et al., 2009; Irwin, 2015). Emerging evidence indicates that chronic sleep disturbances promote low-grade systemic inflammation, which is thought to influence brain regions implicated in emotional processing, such as the amygdala and anterior cingulate cortex (Eisenberger et al., 2009; Irwin, 2015). Inflammatory cytokines have been shown to alter neural activity and neurotransmitter systems in ways that may blunt positive affect, enhance negative mood, and impair emotional regulation, which are hallmarks of depressive

psychopathology (Eiseberger et al., 2009). However, the association between sleep disturbance and depression is not unidirectional. Depression itself is frequently accompanied by disrupted sleep architecture, including delayed sleep onset, increased night-time awakenings, early morning waking, and non-restorative sleep (Irwin, 2015). This bidirectional interplay results in a self-reinforcing cycle, where disturbed sleep contributes to the development and maintenance of depressive symptoms, which in turn further degrade sleep quality.

As such, there is growing consensus that sleep should be conceptualised not merely as a passive indicator of mental health status, but as an active, modifiable factor that plays a crucial role in both the onset and treatment of depression (Ladyman et al., 2020a). This evolving perspective has significant implications for clinical practice, highlighting the importance of integrating sleep-focused interventions into mental health care. Recognising sleep as a vital target for prevention and early intervention reframes it as a public health priority, rather than a secondary concern. In this context, understanding how individuals experience and negotiate sleep, particularly during periods of heightened vulnerability, such as pregnancy, can offer important insights into the broader sociocultural and biomedical landscapes shaping mental health outcomes.

Sleep deprivation in pregnancy

Persistent sleep deprivation during pregnancy has been increasingly recognised as a significant risk factor for adverse maternal and obstetric outcomes. A growing body of research demonstrates that insufficient or poor-quality sleep during pregnancy is associated with elevated risks of gestational hypertension and preeclampsia, both conditions posing threats to both maternal and foetal health (Chang et al., 2010). Notably, women who sleep fewer than six hours per night in late pregnancy have been shown to have more than double the risk of developing these complications compared to those who

obtain sufficient rest (Chang et al., 2010). These associations persist even after adjusting for traditional biomedical risk factors, suggesting that sleep represents an independent and modifiable determinant of maternal cardiovascular health (Chang et al., 2010).

Sleep disruption in pregnancy is also implicated in metabolic dysregulation, with research linking short sleep duration to impaired glucose tolerance and a heightened risk of developing gestational diabetes mellitus (GDM) (Facco et al., 2010). This link is particularly concerning given the well-established downstream effects of GDM on birth outcomes and long-term maternal health (Facco et al., 2010). Furthermore, fragmented sleep and reduced total sleep time have been correlated with increased rates of preterm birth, a leading cause of neonatal morbidity and mortality (Facco et al., 2010). A prospective study by Okun et al. (2009) found that each additional hour of sleep in late pregnancy was associated with a 20% reduction in the likelihood of preterm delivery, indicating a dose-response relationship between sleep duration and obstetric risk. These findings underscore the physiological sensitivity of the pregnant body to sleep disruption and the potential of sleep as a preventative health target.

Beyond its somatic implications, inadequate sleep during pregnancy also plays a critical role in shaping perinatal mental health trajectories. Sleep disturbances, particularly in the third trimester, have been found to predict greater severity of postpartum depressive symptoms, independent of prior mental health history (Okun et al., 2009). This relationship further illustrates the bidirectional interplay between sleep and mood regulation, wherein poor sleep not only exacerbates vulnerability to psychological distress but may also impair the coping capacities needed during the profound transition to motherhood. Importantly, this adds to the growing recognition of sleep as a central pillar of emotional wellbeing during the perinatal and postnatal period, despite often being overlooked.

Taken together, these findings underscore the imperative to integrate sleep health into routine prenatal care, not merely as an adjunct to physical monitoring but as a critical domain of intervention. Doing so requires a shift away from generic advice toward personalised, context-sensitive approaches that acknowledge the unique physiological and psychosocial challenges of pregnancy. Addressing sleep holistically may not only reduce the burden of obstetric complications but also foster resilience and wellbeing during a period marked by significant biological, emotional, and social change.

Socioecological influences upon sleep

Through a health psychology perspective sleep deprivation and disruption can also affect health related behaviours, including a reduction in physical activity levels, increasing unhealthy dietary behaviours, and escalating the likelihood of alcohol use (Kyle & Henry, 2017). Therefore, acute sleep disruption can exert direct effects on health through neurocellular processes and also indirectly through heightening susceptibility to detrimental health related behaviours (Kyle & Henry, 2017). Socioeconomic disparities significantly influence sleep quality and health outcomes, disproportionately affecting marginalised and indigenous populations (Paine et al., 2016). In AoNZ, systemic inequities and racial discrimination experienced by Māori contribute to poorer sleep outcomes, including difficulties initiating sleep, more frequent nocturnal awakenings, and early morning awakenings (Paine et al., 2016). These disparities underscore the multifactorial determinants of sleep, shaped by both individual (micro) and structural (macro) factors (Kyle & Henry, 2017).

The socio-ecological model of sleep (Grandner, 2019) offers a useful framework for conceptualising how sleep is impacted by both micro- and macro-level factors. Grandner's (2019) model of sleep provides a framework for understanding these influences, emphasising that sleep is shaped not only by individual level factors such as

genetics, physiology, beliefs, education, and health status but also by broader social and environmental conditions, including housing, employment, culture, and ethnicity. At the macro level, systemic structures such as public policies, globalisation, and technology further shape sleep experiences. To illustrate, individuals with stable health, higher education, and financial security are more likely to reside in affluent neighbourhoods, benefit from supportive workplace policies, and face fewer structural barriers to sleep. Conversely, those with lower socioeconomic status, employment which hinders sleep (e.g., shift work), and from minority backgrounds often experience greater sleep disruptions due to financial stress, healthcare inaccessibility, and discrimination. These disparities perpetuate cycles of poor sleep and adverse health outcomes, reinforcing the need for a holistic, structural approach to sleep health.

As Williams (2011) argues, sleep is not solely a biological necessity, but a deeply social practice embedded within wider structures of power, privilege, and cultural meaning. Where individuals sleep, with whom, and under what conditions are all shaped by, and reflective of, socioeconomic status, gender norms, racialised inequalities, and broader systems of social organisation (Williams, 2011; Grandner, 2019). These contextual dimensions of sleep illustrate its entanglement in everyday hierarchies, rendering it an important yet often overlooked site through which societal values and exclusions are enacted. Within this framework, Williams (2011) identifies two dominant sleep 'agendas' that circulate within contemporary society: the sleep-negative and sleep-positive agenda.

The sleep-negative agenda, still prevalent in many Western neoliberal contexts, constructs sleep as a barrier to productivity, a passive and indulgent act that hinders economic performance and personal success (Williams, 2011). This discourse has been historically linked to capitalist imperatives that glorify sleeplessness as a marker of

ambition and efficiency (Williams, 2011; Zarhin, 2021). By contrast, the sleep-positive agenda, increasingly promoted through public health initiatives and biomedical discourse, reframes sleep as a critical health resource. It foregrounds the biological, cognitive, and emotional benefits of restorative sleep, positioning sleep loss as a serious threat to individual and societal wellbeing (Williams, 2011; Zarhin, 2021). The medicalisation of sleep has thereby contributed to the legitimisation of sleep as an object of scientific intervention and self-monitoring, further intensifying its cultural salience.

Contemporary engagements with sleep are thus situated at the intersection of scientific authority, popular culture, and neoliberal health ideologies. As Zarhin (2021) and Sikka (2021) note, lay publics increasingly encounter expert narratives about sleep through diverse media platforms, including health journalism, wellness blogs, apps, and social media. This confluence of literature, science, and digital media contributes to the construction of sleep within a broader wellness culture that privileges individual responsibility, optimisation, and self-regulation. Within this framework, sleep is reconfigured not only as a health necessity but as a moral obligation, to be monitored, enhanced, and perfected through consumer products and lifestyle adjustments.

Technological devices such as sleep tracking apps exemplify this trend, reinforcing neoliberal logics of healthism by focusing the responsibility for sleep upon the individual (Sikka, 2021). These technologies transform sleep into quantifiable data, reinterpreting subjective rest through the lens of metrics and optimisation. At the same time, they generate lucrative markets that capitalise on anxieties around sleep inadequacy. The commercialisation of sleep thus operates through the production of a moral panic, one that constructs insufficient sleep as a crisis to be solved through consumption and self-discipline (Sikka, 2021) As such, sleep becomes both a site of biomedical concern and a commercialised domain, where corporate interests and individual aspirations converge. In

this context, the imperative to sleep ‘well’ is not only about health but about performing moral worth in alignment with broader neoliberal ideals of control, responsibility, and self-mastery (Zarhin, 2021; Sikka, 2021).

The ideological burden of individual health responsibility has become increasingly magnified for pregnant women in contemporary Western societies (Howson, 2013). Thus, reflecting broader neoliberal logics that privilege self-governance, risk management, and bodily discipline (Howson, 2013). Within this context, the rise of ‘surveillance medicine’ has contributed to the reconceptualisation of health as a project of constant monitoring and intervention, wherein individuals are tasked with the perpetual assessment and regulation of their bodies in relation to potential risks (Howson, 2013). This medicalised gaze becomes particularly acute during pregnancy, a period widely governed by discourses of risk, that render even healthy gestation a site of potential pathology (Howson, 2013). Pregnant bodies are frequently scrutinised not only for their own wellbeing but for the assumed vulnerability of the developing foetus, effectively doubling the moral and medical responsibility assigned to the pregnant individual (Howson, 2013).

This reconfiguration of maternal subjectivity intersects with the dominant ideology of ‘intensive mothering,’ a normative framework rooted in traditional gendered expectations that position mothers as self-sacrificing, child-centric, and solely accountable for the optimal development of their children (Hays, 1996). Initiated during pregnancy, this framework constructs motherhood as a high-stakes moral enterprise in which women are expected to subordinate their own needs, including sleep, to prioritise the imagined future wellbeing of the child. Within neoliberal societies, the ideology of intensive mothering is paradoxically coupled with the expectation that women participate equally in the paid labour force, effectively requiring them to perform the dual and often conflicting roles of ideal worker and ideal mother (Hallstein, 2006).

The implications of these cultural demands are profound. Pregnant women report heightened feelings of guilt, inadequacy, and self-blame when they perceive themselves as failing to meet idealised health behaviours, including expectations around sleep (Cappellini et al., 2019). Despite the physiological inevitability of sleep disruption during pregnancy, particularly in the third trimester, many women experience these disturbances not as a normative aspect of gestation but as evidence of personal failure (Cappelini et al., 2019). As Cappellini et al. (2019) demonstrate, sleep becomes moralised within this landscape, positioned as both an indicator of responsible motherhood and a resource to be meticulously managed. Consequently, the sociocultural pressures surrounding sleep during pregnancy exemplify how biomedical discourses and neoliberal ideologies converge to shape women's embodied experiences, reinforcing gendered inequalities under the guise of health promotion.

Sleep in pregnancy

Evidently, sleep is vital for optimal health and wellbeing throughout the life course, with key life events significantly impacting sleep patterns, notably during pregnancy (Signal et al., 2022). Pregnant women are often burdened with the extra responsibility of acquiring adequate sleep, despite often facing significant obstacles to attaining these ideals during pregnancy (Ladyman et al., 2022; Santiago et al., 2001). While sleep disturbances during pregnancy are commonly acknowledged as part of the normative experience, emerging research underscores the negative implications of inadequate sleep for both maternal and baby health (Signal et al., 2014). Moreover, the perinatal period also situates women at an increased risk to sleep disruption and mood disturbances, characterised by a bidirectional relationship wherein inadequate sleep exacerbates mood disturbances, and mood disturbances contribute to insufficient sleep (Ladyman et al., 2022). Notably, a positive correlation between depressive symptoms and sleep disruption is reported, which has implications both

antenatally and postnatally in women's health (Ladyman et al., 2022). Sleep disturbances in early pregnancy have also been associated with depressive symptoms in later pregnancy (Ladyman et al., 2020a). Furthermore, evidence suggests a relationship between poor sleep quality in pregnancy with an increased risk for gestational diabetes, hypertension, and premature delivery (Ladyman et al., 2022). Therefore, by supporting and improving sleep quality in the sphere of maternal health, by proxy it becomes a pathway to improve overall maternal and infant health (Ladyman et al., 2022).

Sleep in pregnancy is a subject of frequent inquiry by many pregnant women seeking information, however there is a scarcity of empirical data regarding healthy sleep during each trimester of pregnancy (Ladyman & Signal, 2018). There tends to be an over representation of the negative aspects of insufficient sleep within the media, however recent efforts have sought to frame sleep positively and highlight the strengths of good sleep (Ladyman & Signal, 2018).

Sleep changes across the trimesters in pregnancy

Sleep undergoes marked changes across the course of pregnancy, influenced by shifting physiological, hormonal, and psychological states. These changes are neither uniform nor linear; rather, they reflect a complex interplay between internal transformations and external circumstances that affect sleep. Existing research has outlined a trimester-specific trajectory of sleep disruption, with unique sleep disturbances and adaptations emerging at each stage of gestation (Mindell et al., 2015).

In the first trimester, increased levels of progesterone, often referred to as the ‘sleep-inducing hormone’ tend to produce heightened daytime sleepiness and fatigue (Lee & Gay, 2004). Many women report longer total sleep times and increased napping in early pregnancy, yet this is often coupled with more fragmented nighttime sleep due to nausea, vivid dreams, and frequent nocturnal awakenings (Lee & Gay, 2004). These interruptions are

often attributed to hormonal shifts as well as anxiety related to early pregnancy adjustment and potential pregnancy loss (Lee & Gay, 2004). Despite a tendency toward increased sleep duration, perceived sleep quality may begin to decline, initiating a paradoxical experience of sleeping more, yet of lesser quality.

By the second trimester, some sleep disturbances may abate as hormonal levels stabilise, and nausea diminishes. This period is often considered a 'honeymoon phase' for sleep, with relatively fewer interruptions and improved daytime alertness (Lee & Gay, 2004)). However, some women begin to experience discomfort associated with physical changes such as uterine growth, musculoskeletal strain, or gastroesophageal reflux, which may subtly disrupt sleep (Wilson et al., 2011). Although fewer studies focus exclusively on the second trimester, evidence suggests a slight decline in sleep efficiency and a shift toward lighter stages of sleep, potentially foreshadowing the intensifying disturbances of late pregnancy (Lee & Gay, 2004).

The third trimester is widely recognised as the most sleep-disrupted phase of pregnancy. Women frequently report difficulties initiating and maintaining sleep, with causes including physical discomfort (e.g., back pain, leg cramps), nocturia, foetal movement, and increased anxiety about labour and impending parenthood (Facco et al., 2010; Mindell et al., 2015). Objectively measured sleep architecture often shows a significant reduction in deep sleep (slow-wave sleep), increased wakefulness after sleep onset, and shortened REM sleep duration (Lee & Gay, 2004). Moreover, the prevalence of clinically significant sleep disorders such as insomnia, restless legs syndrome (RLS), and obstructive sleep apnoea (OSA) increases substantially during the third trimester (Sedov et al., 2018). These sleep disruptions not only impact maternal mood and daytime functioning but are also associated with adverse obstetric outcomes, including gestational hypertension and preterm birth (Okun et al., 2009).

Understanding the trimester-specific changes in sleep is essential for appreciating how sleep in pregnancy is experienced as both a biological process and a socially situated phenomenon. Although these patterns have been well documented in biomedical literature, they are often presented in reductive or pathologising ways. This thesis takes a more holistic approach by examining how such changes are interpreted, negotiated, and experienced by pregnant women within broader cultural and digital media landscapes.

Sleep in Aotearoa, New Zealand

Emerging research on sleep in AoNZ has increasingly highlighted the complex interplay between socio-demographic determinants and sleep health, challenging universalised understandings of normative sleep patterns (Crestani et al., 2022; George et al., 2021; Haami et al., 2024). A growing body of scholarship has foregrounded how Māori and Pacific conceptualisations of sleep are shaped by holistic worldviews that emphasise collectivism, intergenerational living, and spiritual dimensions of wellbeing, perspectives that often diverge markedly from biomedical and Western-centric sleep paradigms (Crestani et al., 2022; George et al., 2021; Haami et al., 2024). These culturally situated beliefs inform diverse sleep practices, including sleeping arrangements, caregiving expectations, and attitudes toward sleep duration and disruption. However, structural inequities, such as income insecurity, housing instability, overcrowding, and limited access to culturally safe healthcare, disproportionately expose Māori and Pacific communities to heightened risks of sleep disturbance and poor sleep outcomes (McLay et al., 2023; Muller et al., 2020; Paine & Gander, 2013; Paine et al., 2004).

Among pregnant populations, these inequities are particularly pronounced. A significant proportion of women in AoNZ experience poor sleep quality and elevated depressive symptoms during the perinatal and postpartum periods, with these burdens

unequally distributed across ethnic and socio-economic intersections (Ladyman et al., 2020a). Sleep-related health disparities are further compounded by intersecting axes of marginalisation, wherein ethnicity, class, age, and access to care intersect to exacerbate sleep disruption for already vulnerable groups (Signal et al., 2014). For instance, wāhine Māori are disproportionately represented among those reporting severe sleep disturbances during pregnancy and are also more likely to experience adverse maternal health outcomes, including elevated rates of maternal suicide and mortality (Ladyman et al., 2020a). These patterns reflect the enduring effects of colonisation, racism, and institutional bias within health systems, which continue to constrain reproductive justice and health equity for indigenous women in AoNZ.

Crucially, while sleep disruption is a near-universal experience during pregnancy, evidence suggests that changes in sleep architecture are not solely biologically determined (Paine et al., 2004). Rather, age, ethnicity, and socio-demographic positioning play a critical role in shaping the severity and consequences of sleep disturbance across gestation (Paine et al., 2004; Signal et al., 2014). These findings call for a nuanced understanding of maternal sleep as both a physiological and socio-political phenomenon, requiring intersectional approaches to research, healthcare delivery, and policy. Efforts to improve maternal sleep health in AoNZ must therefore extend beyond individualised behavioural interventions to address the broader structural and cultural determinants that underpin sleep inequities, particularly for marginalised populations.

Sleep in the media

In recent years, there has been a marked increase in the visibility of sleep within mainstream media, reflecting and reinforcing a growing public interest in sleep health, partly driven by advances in sleep science (Breheny et al., 2023). A body of international scholarship has examined how sleep is constructed in media narratives, offering insight

into how sleep-related beliefs, attitudes, and behaviours are shaped across various populations (Boden et al., 2008; Williams et al., 2008; Zarhin, 2021). These studies consistently highlight how sleep is frequently framed as both an individual responsibility and a consumable health asset. Such framings often serve as a conduit for broader societal discourses around productivity, efficiency, and the moral imperatives of self-optimisation (Williams et al., 2008). However, critical analyses have revealed a recurrent disconnect between the messages conveyed in sleep-related media and the empirical realities of sleep science, as well as the socio-cultural contexts in which people sleep (Boden et al., 2008; Breheny et al., 2023). For example, a recent study in AoNZ examining media portrayals of sleep in the context of ageing found that the narratives tended to individualise responsibility, offer overly simplistic solutions, and fail to acknowledge the structural and environmental determinants of sleep (Breheny et al., 2023). These findings echo international critiques that media representations often lack nuance, omitting the complexity of factors such as economic precarity, housing instability, or cultural variation in sleep practices.

Given the critical role sleep plays in our wellbeing, examining how media discourses both construct and influence public perceptions and experiences of sleep warrants further exploration (Sikka, 2021). The dynamic landscape of digital media serves as a unique lens through which social discourse can be understood, perpetuating cultural norms, values, and beliefs. This is particularly apparent with the media's portrayal of sleep, which is often framed as a deficit and sensationalised (Zarhin, 2023). However, in more recent years sleep has been increasingly framed in positive health terms (Buysee, 2014; Zarhin, 2023). To illustrate, Buysee (2014) conceptualised five dimensions which were most prominent in assessing and measuring sleep in current society: sleep duration, sleep continuity or efficiency, sleep timing, alertness/sleepiness, and sleep

satisfaction/quality. These five domains facilitate a holistic approach to sleep within modern discourse, highlighting the multidimensional concept of sleep health (Buysee, 2014; Zarhin, 2023). However, sleep research still predominantly focuses upon biological mechanisms of the physical realm of sleep, rather than the wider macro social contexts and environments people exist within (Zarhin, 2023). Yet, there is a small body of research which explores correlations between sleep beliefs and subsequent sleep behaviour, but a gap still remains regarding the sociocultural influences upon sleep (Zarhin, 2023). This necessitates further studies to explore how sociocultural discourses shape sleep health, and how the media may perpetuate such discourse and understandings.

Within contemporary media landscapes, research findings and lived experiences are frequently presented alongside sponsored content, commercial advertising, and informal advice (Gibson et al., 2024). Such content both informs and reinforces dominant social narratives and stigmas related to age, gender, class, culture, sleepiness, and illness. Much of the international literature on sleep and media is Eurocentric, and has critiqued the medicalisation of sleep problems, the gendered construction of sleep in relation to bodily discipline and productivity, and the broader adaptation of sleep to meet neoliberal work expectations. These studies point to a common disconnect between media portrayals and the nuanced realities of sleep as a socially and biologically complex phenomenon.

Emerging research in AoNZ (Gibson et al., 2024; Ross et al., 2024), mirrors these international critiques while highlighting localised patterns of sensationalism and contradiction in mainstream reporting on sleep. Media representations of sleep in older adults, for example, often frame sleep as a deteriorating function associated with ageing, portraying sleep both as a remedy for and a contributor to illnesses like dementia. Despite the complexities of age-related sleep changes, media accounts tend to promote oversimplified solutions that neglect social context (Gibson et al., 2024).

Similarly, portrayals of sleep during pregnancy tend to invoke idealised models of motherhood. Themes such as ‘banking sleep’ before childbirth and rigid prescriptions for sleep practices are positioned as maternal responsibilities (Gibson et al.,2024). These narratives not only reinforce intensive mothering ideologies but also present sleep deprivation as an inevitable aspect of parenthood. In some cases, media discourses depict poor sleep in pregnancy as symbolic of deeper structural hardships, such as inadequate housing or labour conditions, without engaging with the systemic causes. This thesis extends prior research which undertook a reflexive thematic analysis of *The Spinoff*, a widely read digital media platform in AoNZ. A dataset of 125 sleep-related articles published between 2014 and 2023 were analysed to identify discursive patterns surrounding sleep, with particular attention to representations of sleep loss in the context of parenthood and pregnancy (Gibson et al., 2024). The analysis revealed a notable duality in media portrayals: on one hand, articles often adopt a light-hearted or humorous tone to normalise parental fatigue, portraying sleeplessness as a shared and expected rite of passage into parenthood. On the other hand, more serious coverage underscores the detrimental health consequences of chronic sleep deprivation, including associations with mental illness, impaired functioning, and long-term physiological harm. This juxtaposition reflects a broader oscillation within the media between trivialising and medicalising sleep loss, sometimes within the same article (Gibson et al., 2024). Such ambivalence is particularly salient in portrayals of pregnant and postpartum women, where dominant narratives of maternal responsibility, self-regulation, and optimal health practices intersect with conflicting cultural expectations about endurance, sacrifice, and care. These media constructions form a critical backdrop to this thesis and raise important questions about how public discourses shape and constrain understandings of sleep during pregnancy. By juxtaposing media representations with pregnant women’s own narratives, this present

thesis explores how women interpret, internalise, negotiate, or resist these mediated expectations. In doing so, it contributes to a more nuanced understanding of the socio-discursive landscape surrounding pregnancy and sleep in contemporary AoNZ. Importantly, audiences are not passive recipients of such narratives. People engage with media in varied and complex ways: accepting, modifying, or contesting the messages they receive. Recognising the interpretive role of audiences is crucial for understanding how media discourses around sleep influence individual behaviours and broader cultural attitudes.

Research exploring audience reception of sleep-related media content highlights the complex and often unintended consequences of sensationalist reporting. One notable study examined public responses to an online news article linking sleep disruption to Alzheimer's disease, using thematic analysis of over 500 Facebook comments (Breheny et al., 2025). While the original scientific publication and accompanying press release conveyed cautious conclusions about the implications for human health, the media significantly amplified the message, framing even a single night of disrupted sleep as potentially pathogenic (Breheny et al., 2025). Audience responses diverged markedly depending on personal identification with the sleep issue: those who reported sleeping poorly often reacted with fatalism or distress, while self-identified 'good sleepers' felt reassured by the article's implications (Breheny et al., 2025). Notably, the emotional intensity of the reporting sometimes prompted scepticism toward the scientific message itself, as audiences questioned its credibility or coherence. This study illustrates that audiences are not passive recipients of health messaging; rather, they actively interpret, challenge, and emotionally respond to media discourse, particularly when messages conflict with lived experience or appear overly deterministic (Breheny et al., 2025). Such findings underscore the need for nuanced and responsible media portrayals of sleep

science and support this thesis's emphasis on understanding how pregnant women make sense of sleep-related media messages in their everyday lives.

Together, the literature reviewed underscores the complex and multifaceted nature of sleep, shaped not only by physiological processes but also by sociocultural expectations, gendered norms, and media discourses. While existing literature provides valuable insights into the sociocultural dimensions of sleep, there remains a significant gap in understanding how pregnant women navigate and internalise sleep-related media messages. The convergence of scientific messaging, commercialisation, and maternal responsibility in media representations of sleep calls for greater empirical attention, particularly from the perspective of those most affected. This research aims to explore how pregnant women in AoNZ engage with sleep-related information, how they respond to commercialised sleep products, and how media narratives influence their perceptions of sleep health and maternal responsibility. By addressing these questions, this study seeks to contribute to a more nuanced understanding of sleep discourse, pregnancy, and media engagement in contemporary AoNZ society.

A critical feminist understanding of sleep in pregnancy and the media

While the literature reviewed in this chapter provides a strong foundation for understanding the physiological, psychological, and sociocultural dimensions of sleep during pregnancy, this thesis recognises the need for a more integrated critical feminist framework that brings together interdisciplinary insights from feminist theory, media studies, and critical health psychology. Pregnancy and sleep, when examined together, present a compelling avenue through which broader power relations, discursive formations, and neoliberal health imperatives can be interrogated. As such, this section outlines the key theoretical and conceptual lenses that are underdeveloped in existing literature, and which underpin the contribution of this thesis.

Firstly, feminist theorists have long critiqued the medicalisation of pregnancy and the ways in which women's bodies become sites of surveillance, regulation, and risk management (Lupton, 2012; Kukla, 2008). These critiques reveal how pregnant women are discursively constructed as both responsible caregivers and potential threats to foetal wellbeing, subject to moral scrutiny and held accountable for health outcomes beyond their control (Lupton, 2012). In the context of sleep, this surveillance extends to how rest and fatigue are interpreted as either appropriate self-care or as signs of failure to maintain the optimal level (Cappellini et al., 2019). Yet, sleep during pregnancy is not solely a biological function, it is entangled with social expectations, normative gender roles, and intersecting inequalities.

Secondly, there is a relative lack of research that draws on feminist theory to explore how sociocultural and political domains may shape pregnant women's experiences of sleep. For instance, wāhine Māori and Pacific women in AoNZ experience disproportionate rates of sleep disruption, yet little scholarship addresses how these disruptions are compounded by structural racism, colonisation, and intergenerational trauma (Paine et al., 2016).

Third, existing studies on sleep in the media often focus on content analysis, identifying themes in health journalism or public discourse (Williams et al., 2008; Zarhin, 2023). However, few empirical studies have examined how pregnant women interpret, negotiate, or resist these media messages. Drawing from audience reception theory (Hall, 1980) and feminist media studies (Gill, 2007), this research acknowledges pregnant women as active agents who make meaning from media in diverse and sometimes resistant ways. Media narratives are not passively absorbed; they are filtered through lived experience, cultural background, and emotional labour.

Finally, there is a need to situate AoNZ more explicitly within the global scholarship on sleep and maternal health. While some studies have explored local media representations (Breheny et al., 2023; Gibson et al., 2024; Ross et al., 2024), there remains a gap in

understanding how pregnant women negotiate and navigate such discourse. This thesis seeks to contribute to this emerging field by exploring how pregnant women in AoNZ interpret, internalise, or resist media messages about sleep within their specific sociocultural contexts.

In addressing these gaps, this thesis positions itself within a critical feminist tradition that values lived experience, challenges biomedical reductionism, and interrogates the social construction of health. It foregrounds the voices of pregnant women, not as passive recipients of expert knowledge, but as situated knowers navigating a complex and contradictory media landscape. Through this lens, sleep becomes not only a biological imperative but a deeply political, affective, and socially embedded practice.

Chapter Three:

Research Aims

This study aimed to investigate the intricate dynamics of sleep discourses as they appear within AoNZ media landscape and to examine the consequential impact of these narratives on pregnant women's lived experiences. The primary objectives were twofold: firstly, to critically explore how media representations construct, reinforce, and perpetuate expectations surrounding sleep during pregnancy; and secondly, to analyse the ways in which pregnant women actively negotiate, interpret, resist, or accommodate these dominant discourses in their everyday lives. By adopting a critical feminist perspective, this research sought to illuminate how gendered norms, and societal expectations intersect with and shape pregnant women's embodied experiences of sleep. This lens allowed for a deeper understanding of the ways power relations and normative discourses regulate maternal bodies and behaviour, particularly through the moralisation and commercialisation of sleep. Ultimately, this study aspires not only to contribute valuable empirical insights into the complex social constructions of sleep and pregnancy, but also to build upon, critically engage with, and challenge existing literature within sleep studies, maternal health, and media discourse analysis. Through this contribution, the research aims to foreground pregnant women's voices and experiences, fostering more nuanced and socially aware conversations around sleep, health, and motherhood in both academic and public spheres.

Positioning of my research

From my personal positionality as a European woman living in AoNZ who was pregnant during the interview stage of this research project, I acknowledge some of the similarities of experiences I might have shared with participants. However, I realise I do not embody the AoNZ population and may have divergent cultural understandings. While I

have not navigated the complexities of sleep and pregnancy prior to this, I have lived as a cis-gendered woman within a neoliberal society, contributing to an embodied experience of gender discourse. Acknowledging my privileges from ethnicity and education, I have aspired to commit to continuous reflexivity to scrutinise my assumptions, expectations, and reactions throughout the research process (Olmos-Vega et al., 2022). Details about my personal background as a master's student currently studying at Massey University were transparently shared with participants through the project's information sheet. However, I acknowledge my reflexivity must extend beyond merely disclosing information, and I have continuously examined my own prior experiences that might shape decisions and influence the trajectory of the study, for example why am I interpreting data in such a way, and how might this impact my analysis (Olmos-Vega et al., 2022). Interpersonal reflexivity has also been a focal point, especially concerning the power dynamics inherent in the researcher to participant relationship. Through acknowledging the vulnerability of pregnant women, particularly those of ethnic minority backgrounds, it has been crucial to empower participants by fostering a collaborative approach through the co-creation in determining the research trajectory. To enable this, respondent checking of interview transcripts was implemented to ensure that participants had a final say in the outcomes of interview data. As a researcher wielding influence in the realm of knowledge production, researcher triangulation was employed by consulting regularly with both my supervisors, Dr Rosie Gibson and Professor Leigh Signal.

Through a professional standpoint, this study builds upon my prior research engagement as a recipient of a summer research scholarship through Massey University's Sleep/Wake Research Centre. In this capacity, I previously conducted a pilot study analysing online media articles from '*The Spinoff*' on sleep, critically exploring the ways in which sleep was framed in digital media discourse. This experience informed my

understanding of media representations and their potential implications for perceptions of sleep. Subsequently, this helped to reinforce the importance of interrogating how such discourses intersect with lived experiences. Through this research involvement I was able to collaborate with the Sleep/Wake research team at Massey University and attend a conference in February 2024 ‘Through sickness and in health’. My previous research experience has deepened my understanding of sleep as more than just a biological process; it is a fundamental part of daily life shaped by broader social and cultural influences. Additionally, my professional background has equipped me with a critical perspective on how sleep is represented and interpreted across different contexts. This insight is particularly relevant to the present study, seeking to unpack sleep discourses through the perspective of pregnant women in AoNZ.

Marsden project

This thesis is situated within the broader Marsden-funded programme *Sensationalising Sleep: Discourses and Practices of Sleep in Aotearoa (2023–2026)*, which critically investigates how sleep is socially constructed and represented in contemporary Aotearoa New Zealand. Led by Dr Rosie Gibson, the project explores media discourses, audience interpretations, and theoretical models of sleep through a four-phase qualitative research design. It combines thematic and critical discourse analyses with community-based inquiries to reframe sleep as a socially and culturally mediated practice, rather than a solely biological function.

As a focused thematic analysis, this thesis contributes to the Marsden programme by exploring the specific context of sleep during pregnancy, a life stage underrepresented in social sleep research (Ross et al., 2024). Through analysis of both digital media content and interviews with pregnant women, the study investigates how media discourses frame sleep in relation to maternal responsibility, risk, and productivity. These findings align with

phase two of the Marsden project, which examines how dominant narratives are constructed within sleep-related media content in AoNZ.

In addition, this thesis contributes to phase three of the Marsden Sensationalising Sleep project by offering empirical insight into how a key audience group, pregnant women, engage with, interpret, and respond to sleep-related messaging within the contemporary media landscape. By foregrounding pregnant women's voices, this study reveals the complex ways in which they navigate conflicting and often anxiety-inducing discourses about sleep, challenging the notion that such messages are passively received. The interview findings underscore the emotional, relational, and pragmatic dimensions of sleep during pregnancy. Such dimensions that are frequently obscured or oversimplified by media narratives that favour commercialised, individualised, or moralising framings of rest. These insights illustrate the broader tensions between lived experience and idealised representations of sleep, highlighting the importance of contextualising sleep practices within real-world social, physiological, and psychological conditions. In doing so, this research aligns closely with the overarching goals of the Marsden project, particularly its commitment to disrupting dominant biomedical and consumerist paradigms of sleep. By illuminating the situated knowledge and critical agency of pregnant women, this study contributes to the development of more inclusive, culturally attuned, and socially responsive frameworks for sleep research, public health messaging, and health promotion practice in AoNZ.

Method

Design

Qualitative methodology was selected for this study due to its capacity to foreground the lived, embodied, and socially mediated experiences of pregnant individuals navigating disrupted sleep. In contrast to quantitative approaches that often seek generalisability or objective sleep metrics, qualitative methods offer a nuanced lens through which the relational, emotional, and contextual dimensions of sleep disruption can be explored (Braun & Clarke, 2013). Semi-structured interviews were appropriate, enabling participants to articulate their narratives in their own terms while allowing the researcher to ask questions reflexively and sensitively. This methodological choice reflects feminist epistemology that values subjectivity, resists hierarchical knowledge structures, and seeks to amplify voices often marginalised within dominant medical discourses during pregnancy (Harding, 1987; Hesse-Biber, 2014). Thematic analysis was employed not merely as a descriptive tool, but as an interpretive framework that attended to patterns of meaning across individual accounts while remaining grounded in the specificity of context (Braun & Clarke, 2021). This approach allowed for an examination of how participants negotiated sociocultural discourses around sleep, responsibility, and motherhood, making it an appropriate methodological fit for a project concerned with power, agency, and the moralisation of sleep behaviours during pregnancy.

This study employed a qualitative, individual interview design underpinned by a critical feminist framework. Semi-structured interviews were conducted via Microsoft Teams, allowing flexibility and accessibility, particularly important for participants navigating pregnancy, and residing in various geographic locations across AoNZ. The critical feminist paradigm shaped both the epistemological stance and analytic orientation of the

study. Drawing on the foundational work of scholars such as Harding (1987) and Hesse-Biber (2014), critical feminism challenges dominant, androcentric paradigms of knowledge production, instead centring the lived experiences of women within systems of power. This study thus viewed sleep not as a purely physiological phenomenon, but as socially constructed and embedded within intersecting structures of gender, health discourse, neoliberal responsibility, and media representation.

Critical feminist theory provided a lens through which to interrogate how sociocultural discourses, and structural inequalities shape pregnant women's experiences and understandings of sleep. This included examining how media messages about sleep during pregnancy reproduce normative ideals of motherhood and how such messages are internalised, resisted, or re-negotiated by participants (Gill, 2007; Lupton, 2012). Through this lens, pregnancy was conceptualised as a site of intensified biopolitical governance, wherein women's bodies and behaviours are closely monitored and regulated under the guise of health optimisation (Lupton, 2012). Sleep, in this context, became a moralised practice, tied to discourses of maternal responsibility and self-care, discourses often intensified by digital media cultures. In line with feminist methodological commitments to reflexivity, power-sharing, and voice (Hesse-Biber, 2014), the interview process was designed to foster an open, participant-led dialogue that acknowledged my own positionality and potential influence as a researcher. The aim was not only to collect rich, contextually grounded narratives but also to critically engage with the structural and discursive forces shaping those narratives. Ultimately, the integration of a critical feminist framework enabled the study to produce knowledge that is both empirically grounded and theoretically engaged, contributing to ongoing conversations about the gendered politics of sleep, reproduction, and media discourse.

Participants

Participants included eleven first-time pregnant women, aged between 22 and 34 years, who were purposefully sampled to explore the potential influence of media discourses on their sleep experiences. This targeted focus on first-time mothers reflects evidence suggesting that individuals undergoing their first pregnancy are particularly receptive to external information sources as they adapt to the physical, emotional, and social transitions associated with becoming a parent (Salarvand et al., 2020). Unlike women who have experienced prior pregnancies, first-time pregnant individuals lack experiential knowledge and are therefore more likely to engage in active information-seeking behaviours, often turning to digital media, online forums, and social networks to fill knowledge gaps (Salarvand et al., 2020). Media content, ranging from health advice articles to social media, can thus hold significant power during this life stage, shaping women's expectations and understandings of what constitutes 'healthy' pregnancy behaviour, including sleep.

In order to maintain a clear analytic focus on the interaction between pregnancy-specific media discourses and women's own sleep-related experiences, individuals with prior parenting experience were deliberately excluded from the sample. This decision aimed to avoid introducing potential confounds that could arise if discussions shifted toward infant or child sleep, which could potentially dominate maternal narratives. By concentrating on the experiences of first-time pregnant women, this study was better positioned to unpack how sleep is conceptualised, regulated, and contested during pregnancy itself, prior to the postpartum period, offering insight into how gendered health expectations are mediated through digital and social discourses.

The decision to recruit eleven participants was guided by considerations of information power rather than mere sample size, aligning with qualitative paradigms that

prioritise depth and richness of data over quantitative representativeness (Marshall et al., 2015). Given the study's research aim, to explore how first-time pregnant women negotiate media discourses around sleep, the homogeneity of the sample increased the potential for rich, nuanced accounts relevant to the phenomenon under investigation. Additionally, the purposive sampling strategy ensured participants possessed specific experiential knowledge, facilitating detailed exploration of pregnancy-specific sleep experiences in a digital media context. While larger samples may enhance breadth, qualitative research emphasises saturation of meaning and thematic depth, which was achieved through iterative data collection and analysis processes (Braun & Clarke, 2013). This approach is consistent with feminist qualitative epistemologies that challenge the valorisation of large samples and instead foreground the situated, contextual knowledge produced through in-depth engagement with participant narratives (Hesse-Biber, 2014). Ultimately, the sample size was sufficient to generate meaningful, conceptually rich themes while allowing for close attention to individual variation and complexity within the cohort.

Recruitment for this study was conducted over a three-month period, from April 2024 to June 2024. A purposeful sampling strategy was employed to recruit first-time pregnant women residing in AoNZ, with the aim of capturing participants who were currently navigating pregnancy for the first time.

Participants were recruited via two widely used online parenting communities on Facebook: NZ Mum's due June/July 2024 and Mummy Support Group NZ. These groups were strategically selected due to their large and active membership base, with a combined total of over 16,000 members at the time of recruitment. These online spaces function as virtual communities where pregnant and parenting women regularly seek and share advice, offer emotional support, and exchange information related to pregnancy, birth, and early parenting. As such, they were considered appropriate and efficient platforms for reaching the

target population. A digital recruitment poster (Appendix A) was circulated within these groups following group administrator approval. The poster clearly outlined the inclusion criteria: participants were required to be first-time mothers, currently pregnant, over 18 years of age, and residing in AoNZ. By targeting digital platforms already frequented by the intended demographic, the study was able to access a relevant, self-selecting pool of potential participants with a shared interest in discussing pregnancy-related topics. This method also aligned with the broader aim of the study, which explored the intersection of media, digital environments, and lived maternal experiences. Furthermore, recruiting through social media facilitated geographical diversity within the sample, enabling participation from individuals across different regions of AoNZ, thereby enhancing the contextual richness of the data.

Data Collection Procedure

Qualitative semi-structured interviews were employed, utilising a range of open ended questions and prompts.

To explore how media framing influences pregnant women's perceptions of sleep, two sensationalist news article headlines were selected as prompts during interviews (as shown in Appendix B): *'Poor sleep a danger to pregnancy'* (Stuff.co.nz, 2013) and *'Pregnant women study: sleeping on your back same as smoking 10 cigarettes a day'* (NZ Herald, 2019). These headlines were deliberately chosen due to their emotive language and alarmist tone, which exemplify a common tendency in media reporting to frame maternal health risks in exaggerated or fear-inducing terms (Ecker et al., 2014). Such headlines rely on simplification and dramatic comparisons, such as equating sleep position with smoking, thereby prioritising engagement and virality over accuracy and nuance. This approach aligns with broader trends in contemporary journalism, where digital media outlets increasingly rely on sensationalist framing to drive clicks and shares in a highly competitive attention economy

(Harcup & O'Neill, 2017). Research has shown that headlines play a disproportionate role in shaping audience interpretation, often exerting more influence than the content of the article itself (Ecker et al., 2014). When headlines use emotionally charged or extreme language, they can induce anxiety, especially in contexts where readers already feel vulnerable or uncertain, such as during pregnancy (Ecker et al., 2014). Thus, presenting these headlines to participants enabled a discussion about how media messages are internalised and interpreted in the context of personal health behaviours and expectations.

The decision to use these particular headlines was informed by literature on audience reception, which underscores the importance of understanding how individuals engage with media texts based not only on content, but also on their own experiences, values, and social positions (Livingstone, 2004). In the case of maternal health, pregnant women are often positioned as morally responsible subjects, with media discourses contributing to a heightened sense of surveillance and personal accountability (Lupton, 2012). By prompting participants with these headlines, the study aimed to investigate whether and how such narratives contribute to stress, guilt, or changes in sleep-related behaviours.

Moreover, these headlines exemplify how the media can play a regulatory role in instructing women on what constitutes safe or risky behaviour during pregnancy. Sensationalist reporting, while often grounded in scientific findings, tends to strip away the contextual complexities of research, reducing nuanced data into simplified risk messages (Ecker et al., 2014). By eliciting participants' responses to such headlines, this study contributes to a growing body of work that critiques the ethical implications of health reporting and calls for more responsible, balanced media practices in the representation of maternal health.

The choice of semi-structured interviews was intended to elicit detailed responses from participants and allow space to foster in depth discussions. This approach facilitated a nuanced exploration of topics, enabling participants to formulate pathways, from which they may articulate their unique experiences and perspectives while minimising interviewer interference (Brinkmann, 2013). The selection of open-ended questions also facilitated space for participants to detail their own experiences through their own terminology, aligning with feminist principles of participant-centred interviewing (Runswick-Cole, 2012).

Individual interviews were deliberately chosen due to the potential disclosure of sensitive information regarding pregnancy and sleep patterns. As such, this format offered a heightened level of confidentiality within a one-on-one setting, thereby encouraging participants to discuss their intrapersonal experiences of media-driven discourses on sleep in pregnancy and how this shaped their own experience (Brinkmann, 2013).

The interviews were conducted via Microsoft Teams, using the recording feature, and the duration of each ranged between 25-45 minutes long. Each interview followed the interview schedule as outlined in Appendix C. Interviews began with historical inquiries and progressively delved into deeper topics surrounding pregnancy and sleep. This approach aimed to foster rapport building with participants and establish whānaungatanga (meaningful relationships) throughout the research process. Interviews were subsequently transcribed using Microsoft Teams automated transcription feature, then manually corrected, and finally annotated. This method was employed to accurately capture the nuanced dynamics of conversational interaction during the interview (Park & Hepburn, 2022).

Participants were given a one-week time frame post transcription, to request to check their transcript and verify the accuracy of interpretations and facilitate any adjustments prior to data analysis. After this process of respondent checking occurred with two participants

requesting minor changes, all transcripts were de-identified, and pseudonyms used for each participant. Participants were given a further week (two weeks total post interview) to request to withdraw from the study. No participants withdrew.

Ethics

Ethical approval was granted for this study by the Massey University Ethics Committee (OMI 24/06) as shown in Appendix D. This study was informed by Massey University's code of ethical conduct (2017), placing prominence on the ethical principles of non-maleficience and protection, by ensuring participants were not at risk to exposure of harm, through holding a safe space and if any psychologically triggering topics were bought up, relevant resources were given to them for support, as listed in Appendix E. Participants were shown aroha and care for their wellbeing, through establishing adequate support, and allowing any questions to be raised, prior, during, and post interview. Participants were also given the option to pause, take a break, or terminate the interview at any time as demonstrated in Appendix E. Before the interview started participants were advised they did not have to answer any questions they did not wish to. Aro ki te ha, awareness for participants was also prioritised through establishing informed consent from participants prior to the interview commencing and communicating in clear language to confirm understanding. Consent has been understood as an ongoing process throughout this research project, to ensure participants were actively informed during each step, helping to rebalance specific power dynamics in qualitative interview designs, and ensuring that participant centred modalities were prioritised (Anyan, 2015). Consent forms can be found in Appendix F. Participants were compensated with a $30 online prezzy voucher for their time and given the option to receive the final outcomes of the study, with three participants requesting such.

As this research was conducted in AoNZ, it was essential to approach the project with a strong commitment to the principles of Te Tiriti o Waitangi. A key area of focus was on upholding tino rangatiratanga (autonomy) by recognising participants as autonomous individuals. As such, informed consent was treated as a continuous process, with participants offered the opportunity to review, amend, or withdraw their interview transcripts within an agreed timeframe (Tuhiwai Smith, 2020). To ensure cultural safety, the research design drew on the *Te Ara Tika* framework for Māori ethical research practice (Hudson, 2010), with an emphasis on building whānaungatanga (relationships). Before commencing each interview, participants were asked about any cultural preferences and whether they wished to open or close the session with a karakia, in alignment with appropriate tikanga. One participant requested a karakia to open and close their interview session.

Power dynamics between myself as the researcher and the participants were actively negotiated, and reflexivity was embedded throughout the process to ensure that participants had an active and engaged role in shaping the direction of the research. This approach upheld the principle of mana-enhancement, recognising and respecting participants' authority and contributions (Tuhiwai Smith, 2020). As Anyan (2015) notes, power within the interview context can be influenced by variables such as gender, ethnicity, education, and socio-economic background. Therefore, as a researcher I made a conscious effort to address my own positionality with transparency and to maintain ethical and cultural integrity across all stages of the research.

Analysis

The interview transcripts were analysed individually using phenomenological thematic analysis to further explore women's subjective sleep in pregnancy experiences. Phenomenological thematic analysis is a qualitative analytic approach that integrates the

descriptive focus of phenomenology with the systematic process of thematic analysis to explore lived experiences in depth. This method aims to uncover the essence of participants' subjective realities by identifying, analysing, and interpreting recurring patterns of meaning across narratives while remaining grounded in their embodied and contextualised experiences (Smith et al., 2009; Braun & Clarke, 2021). Unlike purely descriptive thematic approaches, phenomenological thematic analysis attends specifically to how phenomena are experienced and constituted in consciousness, enabling rich, nuanced insights into complex human experiences (Smith et al., 2009). Braun and Clarke (2021) emphasize that this approach is iterative and reflexive, requiring researchers to engage deeply with data to balance description with interpretative analysis, while maintaining sensitivity to the participants' perspectives. This analytic strategy is particularly suited to studies within critical feminist frameworks, as it foregrounds participant subjectivity and challenges dominant narratives by revealing diverse and situated meanings (Smith et al., 2009). Thus, phenomenological thematic analysis offers a rigorous yet flexible methodology for exploring the multifaceted experiences of phenomena such as pregnancy-related sleep disruptions within digital media and socio-cultural contexts.

The analysis was guided by Braun & Clarke (2020) six step method of thematic analysis to produce subsequent themes. Firstly, transcripts were read and re-read to establish familiarity with the data. Secondly, initial descriptive codes were generated, followed by producing interpretative codes using NVivo software. Then subordinate themes were produced through a detailed examination of the coded dataset and documented in Microsoft word. These themes were then clustered across all transcripts to produce superordinate overarching themes. This process involved identification and production of recurring patterns and salient connections which aligned with the research question: how do pregnant women negotiate sleep discourses in the media. The themes were then defined and named, and lastly

findings reported. The interpretations were influenced by the social and cultural constructions of gender as well as the women's accounts of how this shaped their experience of sleep in pregnancy. The undertaken approach aligned with critical feminist epistemology, as it encompassed a reflexive and reiterative process of respondent checking and input (Braun & Clarke, 2020; Clarke & Braun, 2019; Wiggington & LaFrance, 2019).

Ensuring analytic rigor and trustworthiness was central to the credibility of this research project. Thematic analysis was conducted with attention to established criteria of qualitative rigor, including credibility, dependability, confirmability, and transferability (Braun & Clarke, 2020). Credibility was enhanced through prolonged engagement with the data, iterative reading, and constant comparison within and across transcripts to capture both convergent and divergent perspectives. The use of NVivo software facilitated systematic organisation of codes and themes, allowing for transparent audit trails and documentation of analytic decisions (Nowell et al., 2017). Reflexive journaling during coding sessions supported critical examination of potential researcher biases and interpretive assumptions. Dependability was maintained by adhering closely to Braun and Clarke's (2020) six-phase thematic analysis framework, ensuring a consistent and replicable analytic process. Confirmability was bolstered by respondent validation, whereby participants were invited to review and comment on transcripts, thereby contributing to the accuracy of data representation. Attention was also paid to nuanced data features such as silences, contradictions, and affective cues, which were incorporated into the interpretative journal to enrich thematic depth. Together, these measures contributed to the trustworthiness and integrity of the research outcomes, aligning with feminist commitments to transparency and reflexivity in knowledge production.

Chapter Four:

Findings

Five key themes were developed through participants' experiences of sleep in pregnancy and online media content. Theme 1, disrupted sleep and loss of sleep agency, which captured the common experience of physical discomfort, insomnia, and frequent night wakings, which led to a sense of diminished control over sleep. Theme 2, seeking information and navigating online media content, reflected participants' efforts to understand and manage their sleep by engaging with diverse sources of sleep information. While some felt empowered, others were overwhelmed by conflicting advice, often turning to trusted individuals like family or midwives for clarity. Theme 3, internalised pressure and heightened responsibility for sleep health, illustrated how media messages linking maternal sleep to foetal outcomes led to anxiety, guilt, and self-blame, reinforcing intensive mothering ideals. Theme 4, commercialisation of sleep and the pressure to fix sleep problems, highlighted how targeted social media advertising promoted products such as pregnancy pillows as essential, contributing to a sense of obligation to purchase solutions for sleep difficulties. Finally, theme 5, coping strategies and resistance to sleep messaging. This theme described how participants managed these pressures through relaxation techniques, sleep banking, and selective disengagement from unhelpful advice, allowing them to reclaim agency and prioritise their individual needs over media driven expectations.

Figure 4.1

Superordinate and Subordinate Themes

Superordinate Themes	Subordinate Themes
Disrupted sleep and loss of sleep agency	Frequent sleep disruptions due to insomnia, physical discomfort and frequent toilet trips. Perceived loss of control over sleep agency.
Seeking information and navigating online media content	Actively seeking out information about sleep during pregnancy, engaging with diverse sources. External pressure from the media messages regarding the importance of sleep health in pregnancy. Some felt overwhelmed with conflicting information, while others selectively engaged with trusted sources (friends/family/midwives).
Internalised pressure and heightened responsibility for sleep health	Sleep framed in the media as not just essential for the mother but directly impacting their baby's health and development. Internalisation of these messages leading to heightened stress due to failing to meet ideal sleep. Sense of responsibility often resulted in guilt and self-blame reinforcing the broader intensive mothering discourse.
Commercialisation of sleep and the pressure to fix sleep problems	Pressure to purchase sleep related products: pregnancy pillows and

	targeted social media advertisements. Overwhelmed with advertisements of sleep aids and products from multiple social media sources (Facebook, Instagram). Frustration at the cost of many items, despite most participants purchasing pregnancy pillows anyway.
Coping strategies and resistance to sleep messaging	Coping mechanisms: sleep banking, relaxation techniques, and selective disengagement with sleep advice which did not serve them. Resisting dominant media sleep narratives and challenging the notion of perfect sleep. Reclaiming agency by prioritising their individual needs rather than external media pressure.

Note. A formulation of the superordinate and subordinate themes produced across the interviews data set.

Theme 1 “When you’re pregnant there’s no control over sleep”: Disrupted sleep and loss of sleep agency

This theme captures the profound and often distressing changes participants experienced in their sleep during pregnancy. Two closely related sub themes were produced: first, the frequent disruptions to sleep due to physical and hormonal changes, and second, a perceived loss of control or agency over their own sleep. Together, these sub themes illustrate how sleep, a basic need and source of restoration, becomes a compromised aspect of everyday life during pregnancy.

Participants frequently described disrupted and fragmented sleep, often attributed to a combination of pregnancy-related insomnia, physical discomfort, and frequent nocturnal bathroom trips. For instance, Cassey (aged 34, 33 weeks pregnant) described her third trimester sleep as “definitely worse”, explaining that she would wake “randomly from like 2:00 AM and then every hour after that”, unable to return to sleep. Harriet (aged 29, 22 weeks pregnant) shared similar experiences of pregnancy insomnia, saying she would “wake up at like 3:00 o'clock in the morning” and highlighted how frequent bathroom trips disrupted her nights.

The sense of sleep disruption being beyond participants’ control emerged repeatedly. Sonya (aged 31, 30 weeks pregnant) described her experience as “preparing me for the real insomnia”, reflecting a common cultural narrative that normalises poor sleep during pregnancy as a form of maternal preparation. This framing diminishes the legitimacy of sleep difficulties as real concerns, instead casting them as necessary trials. Similarly, Rachael (aged 29, 32 weeks pregnant) articulated a clear sense of lost autonomy, saying she felt “very out of control of the fact that I don't sleep well because it's not me causing it”, concluding that “when you’re pregnant, there’s no control over sleep”.

A closely related subtheme concerned the physical restrictions that contributed to this perceived loss of agency. Participants frequently noted how bodily changes,

particularly the growing abdomen, interfered with their ability to find a comfortable sleeping position. Sonya (aged 31, 30 weeks pregnant) expressed her frustration, stating she looked forward to “just being able to like lie whatever way you want”. While Polly (aged 29, 24 weeks pregnant) shared that her “tummy is getting in the way, and I can't roll into positions that I want to be in”. Cassey (aged 34, 33 weeks pregnant) also linked her worsening sleep to physical changes, describing how “being a bit bigger and more uncomfortable” made sleep increasingly difficult.

Participants' accounts convey a cumulative burden in which pregnancy transforms sleep from a natural, restorative act into a site of struggle, marked by escalating discomfort, relentless interruption, and a growing sense of diminished agency. What was once an unremarkable routine becomes problematised, as participants found themselves contending not only with the embodied challenges of pregnancy but also with the emotional and psychological strain of persistent sleep disruption. The steady erosion of restful sleep across the trimesters was described not merely as an inconvenience but as a daily reminder of their shifting relationship to their own bodies. This transformation underscores how pregnancy reconfigures bodily rhythms, demanding new forms of adaptation and often leaving individuals feeling alienated from once-familiar practices of rest and recovery.

As participants navigated the intensifying physical demands of pregnancy, sleep often became something endured rather than enjoyed. This repositioning of sleep, from a pleasurable necessity to a task fraught with frustration, challenged participants’ expectations of what the pregnant body should be able to do, particularly within cultural discourses that both idealise and moralise maternal self-care. The relinquishing of sleep agency also reflects a deeper negotiation of autonomy, identity, and control during this life stage. Many participants expressed a loss of ownership over their sleeping bodies, describing the experience as being acted upon by external forces, hormonal, physical, and

discursive, rather than actively managing their own rest. In this way, the disruption of sleep was not only physiological but symbolic, marking a broader psychosocial transition in which notions of self-determination and bodily sovereignty were increasingly contested. Such findings gesture toward the need to recognise maternal sleep not simply as a biomedical concern but as a complex, deeply gendered experience shaped by cultural narratives, social expectations, and power-laden constructions of the pregnant body.

Theme 2 "A lot of mixed messages": Seeking information and navigating online media content

This theme explores how participants sought out and processed information about sleep during pregnancy. It comprises three subthemes: active pursuit of information from various sources, the pressure induced by overwhelming media messaging, and the strategies participants used to manage contradictory or alarming advice.

Many participants actively turned to online platforms, such as social media, blogs, and online forums for sleep advice. Paris (aged 34, 36 weeks pregnant) explained that she commonly used Facebook and other platforms but encountered "a lot of mixed messages", especially regarding sleep position. She recalled seeing content that minimised the risks of back sleeping alongside others warning it could "suffocate and kill your baby". This contradictory messaging was a recurring source of confusion and anxiety. Polly (aged 29, 24 weeks pregnant) voiced a broader concern about credibility, saying, "anyone can make an Instagram post... with not even scientific evidence".

Participants also described feeling pressured or overwhelmed by media content that emphasised the dangers of poor sleep. Cassey (aged 34, 33 weeks pregnant) highlighted the influence of "social media and companies" noting that this was distinct from traditional media, and more personal. Harriet (aged 29, 22 weeks pregnant) described the emotional toll of alarming headlines during her pregnancy:

> "It sort of adds a bit of fear during it and being like, oh God, there's just another thing we have to worry about or have to do" (Harriet aged 29, 22 weeks pregnant).

These media narratives seemed to amplify a broader sense of responsibility and anxiety, compounding the emotional complexity of pregnancy. While some participants felt overwhelmed by the volume and inconsistency of sleep-related content, others adopted more selective approaches. Paris (aged 34, 36 weeks pregnant) described her experience with contradictory information as being "both sides of a coin" and acknowledged the difficulty in making informed decisions when the "credible sources" themselves often disagreed. In contrast, others leaned on trusted figures to help interpret what they saw online. Harriet (aged 29, 22 weeks pregnant) spoke of relying on her midwife and her mother, who worked in maternity care, explaining she would consult them rather than "jumping to the worst conclusion".

Emma (aged 22, 27 weeks pregnant) recalled a reassuring conversation with her midwife, who advised her not to panic if she woke up on her back, but simply to roll over gently, which contrasted to more alarmist messages she had encountered. Rachael (aged 29, 32 weeks pregnant) also emphasised that guidance from medical professionals carried more "weight" suggesting that expert advice helped her navigate conflicting information. Polly (aged 29, 24 weeks pregnant) described learning informally from her mother, a midwife, who had shared anecdotes about common pregnancy sleep issues. Similarly, noted the value of multiple information channels, saying she'd learned from her midwife, antenatal classes, friends, family, and social media.

These varying responses underscore the complex and often ambivalent process of navigating online media messages about sleep during pregnancy. While the proliferation of information across digital platforms afforded participants a sense of accessibility and immediacy, it also exposed them to conflicting, and at times sensationalised, content. This

digital saturation served as both a resource and a risk. As such, for some, the act of seeking information was experienced as a form of agency, self-protection, and responsible motherhood: an attempt to make informed decisions amid uncertainty. For others, however, the abundance of contradictory messages, particularly those couched in fear-based narratives, contributed to feelings of cognitive overload, anxiety, and self-doubt.

The tension between being informed and maintaining emotional regulation was a recurring theme across participants' narratives. Engagement with digital media was not merely passive consumption; it required critical interpretation, emotional filtering, and, in some cases, strategic withdrawal. Many participants developed informal hierarchies of trust, privileging midwives, healthcare professionals, and family members over algorithm-driven content or peer-generated posts. This filtering process reflected an implicit desire to reassert a sense of control and protect themselves from the destabilising effects of online discourse. As such, digital media functioned both as a site of knowledge acquisition and as a terrain of emotional labour, where pregnant women were tasked with managing the affective consequences of their information-seeking practices.

Ultimately, this theme highlights how the digital landscape complicates rather than clarifies the maternal experience of sleep during pregnancy. The need to attain perfect sleep in a context of uncertain and often moralised advice speaks to broader sociocultural expectations surrounding pregnancy and maternal responsibility. Within this framework, sleep is not simply a biological concern but a moral terrain, where the 'good' pregnant woman is expected to be both informed and vigilant. Participants' negotiation of these pressures underscores the importance of contextual, empathetic, and evidence-based communication in maternal health discourse, particularly in a media environment saturated with competing and sometimes harmful messages.

Theme 3 "Taking in that information will definitely scare you": Internalised pressure and heightened responsibility for sleep health

This theme explored the pervasive media driven narrative that links the expectant mothers sleep to the health and wellbeing of her baby, creating a sense of personal responsibility and, in some cases, anxiety. Participants frequently described how sleep was framed not just as a personal need but as an essential factor in their baby's health and development. This framing led many to internalise the pressure to optimise their sleep, resulting in heightened stress when they were unable to meet idealised standards of rest.

The media often emphasised the importance of maternal sleep, highlighting its direct impact on foetal health and development. This framing created a heightened sense of responsibility among expectant mothers, who felt they were not only caring for their own wellbeing but also for the unborn child:

> "And the effects of not sleeping and what that would have on my baby, just like putting my baby in a high stress environment by me not resting. I like kind of just looked up things then and it just basically what I got from it was sleep is important, and you should rest whenever you want. And I really took that on board" Polly (29, 24 weeks pregnant).

Polly's (aged 29, 24 weeks pregnant) reflection illustrates how the media message coupled with her own concern for her baby's well-being led to a personal commitment to prioritise sleep, even if it wasn't always achievable.

As participants absorbed these media messages, many began to internalise the idea that achieving optimal sleep was their responsibility. This sense of duty often translated into stress, frustration, and guilt when they struggled to meet sleep expectations. Harriet (aged 29, 22 weeks pregnant) explained how the overwhelming nature of pregnancy, combined with sensationalised media headlines, heightened her anxiety:

> "Pregnancy, especially for your first pregnancy, is pretty overwhelming full stop.

So I think when you see headlines like that, it sort of adds a bit of fear during it and being like, oh God, there's just another thing we have to worry about or have to do… I think it probably, I think the information I've been seeking is been around sort of like confirmation of ensuring that I'm doing the right thing. So well, like all that, like asking the question, how do I, how should I be sleeping and that has all been the same sort of" (Harriet, aged 29, 22 weeks pregnant).

Harriet's statement highlights the pressure she felt to confirm that she was doing everything 'right' suggesting that the anxiety about sleep was compounded by the fear of failure in meeting societal expectations.

Emma (aged 22, 27 weeks pregnant) echoed this sentiment, particularly about the fear and pressure felt by first-time mothers:

> "Yeah, definitely, and especially for someone that's like pregnant with their first child, like taking in that information will definitely like scare you" (Emma, aged 22, 27 weeks pregnant).

This fear stemmed not only from the volume of information but also from the framing of sleep as a critical aspect of maternal responsibility. The media's portrayal of sleep as a non-negotiable factor in pregnancy health left many feeling insecure, wondering if they were doing enough to ensure their baby's wellbeing.

Sonya (aged 31, 30 weeks pregnant) also noted the sensationalisation of pregnancy related sleep information, which she found triggering: "I feel like if there's gonna be anything about pregnancy, sleep in like that kind of media, it's gonna be super sensationalised, super, like triggering". This remark reflects how media sensationalism exacerbated the emotional strain on pregnant women, making sleep appear as a critical task. The internalisation of these media messages, paired with the pressure to achieve perfect sleep, often led to feelings of guilt and self-blame. These emotions reinforced the broader

ideals of intensive mothering, which emphasise constant vigilance, self-sacrifice, and personal accountability for a child's well-being, even before birth (Hays, 1996). Sonya (aged 31, 30 weeks pregnant) expressed her anxiety about sleep, particularly around the idea of lying on her back:

> "I do really take it seriously. Like I would lie on my back for maybe a couple of minutes like flat in the and then like, ohh God, I should probably roll over. Yes, then to see, an article like this, like, well, why? Why are we not told, you know more that it really is quite serious" (Sonya aged 31, 30 weeks pregnant).

Sonya's reaction shows how the weight of information from the media led her to scrutinise even minor actions, such as her sleeping position, feeling compelled to conform to an idealised standard of 'correct' sleep, even in fleeting moments of discomfort.

These feelings of guilt and self-blame were not simply individual responses to disrupted sleep; rather, they were deeply embedded in broader cultural constructions of motherhood and health responsibility. The media's framing of sleep during pregnancy as a matter of foetal safety and moralised rest, positioning sleep not as a fluctuating physiological experience but as a measurable and controllable behaviour for which expectant mothers must be held accountable. In this context, even brief lapses, such as lying on one's back or waking during the night, became emotionally charged events, interpreted through a lens of potential harm and maternal failure. Sleep practices were scrutinised not only by others but by participants themselves, resulting in self-surveillance and hypervigilance. As such, media narratives did not merely inform participants, they acted as disciplinary mechanisms, shaping how women thought about their bodies, their responsibilities, and their capacity to parent well even before their babies were born.

Moreover, this pressure to attain 'perfect sleep' intersected uneasily with the unpredictability of pregnancy itself. Physiological discomforts, hormonal fluctuations, and

emotional upheavals often made high-quality sleep elusive. Yet rather than offering reassurance or flexibility, dominant media messages frequently framed these challenges as personal failings or risks to the unborn child. The resulting emotional toll, marked by anxiety, fear, and self-doubt, was compounded by the lack of nuance in public discourse, which rarely acknowledged the uncontrollable dimensions of pregnancy-related sleep disturbance.

In sum, participants' experiences point to a broader cultural moment in which sleep has been co-opted into neoliberal health discourses, where individuals are expected to optimise every aspect of their lives, even in periods of profound bodily and emotional transformation. The moral weight attached to maternal sleep not only contributed to individual stress but also reflected a wider tendency to responsibilise women for pregnancy outcomes through behavioural monitoring and media messaging.

Theme 4 "The magic cure to help you sleep in pregnancy": Commercialisation of sleep and the pressure to fix sleep problems

This theme denotes the commercialisation of sleep and the subsequent pressure to 'correct' sleep issues during pregnancy. Many participants encountered a wide range of specific sleep targeted advertisements and interventions to address their sleep issues (notably pregnancy pillows). The prevalence of these commercial messages contributed to a sense of obligation to actively purchase these items in hopes to improve their sleep. This pressure was further amplified by media and consumer culture, shaping expectations around what constituted 'good' sleep and framing sleep difficulties as problems to be solved through commercial means.

A significant element in the commercialisation of sleep was the pervasive targeting of pregnancy pillows through social media advertisements, which presented these items as solutions to sleep difficulties. Cassey (aged 34, 33 weeks pregnant) reflected on the

overwhelming amount of information and pressure to purchase products like pregnancy pillows, despite knowing that they may not be successful in promoting sleep:

> "There is so much information and almost pressure to like buy things to help or this is the magic cure to help you sleep in pregnancy. But that's not really the case… I know it's not gonna get me those eight hours" (Cassey aged 34, 33 weeks pregnant).

Despite acknowledging their limited efficacy, she still purchased a pregnancy pillow, a common response among participants, indicating how the advertising pressure influenced their decisions. Rachael (aged 29, 32 weeks pregnant) highlighted her own efforts to purchase sleep-related products, such as pregnancy pillows, and reintroduce a nightly routine to optimise her sleep:

> "So like for me that was getting, making sure I had like the right kind of pregnancy pillows and I, you know, like I started doing my night time routine again" (Rachael, aged 29, 32 weeks pregnant).

This denotes how commercial messages had a dual effect: they pressured participants to buy items while also leading them to invest emotional energy in the belief that these products would lead to better sleep, despite a clear recognition of their limitations.

The saturation of targeted advertisements on platforms including Facebook, Instagram, and in one instance TikTok further intensified this pressure. Cassey (aged 34, 33 weeks pregnant) shared her frustration with the relentless presence of advertisements on her phone:

> "Yeah and it's probably targeted to me as well, just because of what I'm looking at on my phone, but a lot of targeted ads of like buy this product and you'll get more sleep when you're pregnant, which I mean, I've bought a pregnancy pillow just to help umm with positioning, which has helped a little bit, but obviously not enough"

(Cassey aged 34, 33 weeks pregnant).

The targeted nature of these advertisements not only reinforced the belief that commercial products were necessary for improved sleep, but also contributed to a sense of obligation to try them, despite knowing their limitations.

Emma (aged 22, 27 weeks pregnant) recalled encountering pregnancy pillow advertisements on TikTok, saying, “I saw some on like Tik Tok, some videos of like some ladies suggesting some pregnancy pillows”. These advertisements, often shared by influencers or fellow pregnant women, further blurred the lines between genuine advice and commercial promotion, making it challenging for participants to discern trustworthy information from commercial messaging.

Sonya (aged 31, 30 weeks pregnant) also noted how her search history led to a flood of targeted advertisements for sleep pillows: “Just probably be around like sleep pillows coming up on like, you know, those ads, but obviously because I've googled them and so then like get a lot of those ads and stuff come up”. This personalisation of advertisements, based on individual searches, highlighted the precision with which companies targeted expectant mothers, amplifying the pressure to engage with commercial sleep aids.

Alongside the pressure to purchase sleep aids came the frustration of their often high costs, which further exacerbated feelings of inadequacy when the products failed to live up to expectations. Sonya (aged 31, 30 weeks pregnant) expressed her dissatisfaction with the price of pregnancy pillows:

> “I just kind of like looked into what ones there were available and in fact what it's called Sleepy Belly, I think it’s an Australian one like was coming up all the time and I think it’s still comes up my phone umm but it’s quite expensive. So I found like a cheaper version on Temu and just bought that” Sonya (aged 31, 30 weeks pregnant).

Her comment highlights the internal tension between the desire to alleviate sleep discomfort and the financial burden of purchasing these often expensive products.

Polly (aged 29, 24 weeks pregnant) also voiced frustration with the high costs of pregnancy pillows, using humour to emphasise the reality of their pricing: “I was seeing pregnancy pillows. They're fucking expensive!”. The overwhelming cost of these products added another layer of pressure, as participants felt compelled to buy them, even though they were aware that the products might not provide a perfect solution.

In sum, participants’ reflections highlight how the commercialisation of sleep during pregnancy not only shaped their consumer behaviour but also influenced their emotional responses to sleep difficulties. The widespread marketing of pregnancy-related sleep products, particularly pillows, created a commodified vision of rest, one in which solutions were portrayed as purchasable, and sleep problems framed as personal failings to be corrected through consumption. While many participants recognised the limitations of these products, they nevertheless felt compelled to try them, reflecting how media and advertising construct both the problem and the solution in ways that align with neoliberal ideals of self-management and individual responsibility. This commodification of sleep reinforces the notion that pregnant women must actively invest in their own wellbeing, often through financial expenditure, in order to fulfil the moral expectations of ‘good motherhood’. The emotional toll of this commercial pressure, particularly when costly solutions fail to deliver, raises important questions about how consumer culture exploits maternal vulnerability, shaping both experiences of pregnancy and the wider discourse surrounding perinatal health and self-care.

Theme 5 “Taking everything with a grain of salt”: Coping strategies and resistance

This theme encapsulates the coping mechanisms participants employed to manage sleep-related challenges during pregnancy. Some participants engaged in ‘sleep banking’

attempting to rest more in anticipation of future sleep disruptions, while others used relaxation techniques such as meditation or breathing exercises to improve sleep quality. Additionally, many participants adopted a selective approach to sleep related advice, disengaging from information that they found unhelpful or anxiety inducing. This further highlights how participants reclaimed a sense of agency by prioritising their own needs over external pressures related to sleep. Rather than adhering strictly to media driven expectations or commercialised sleep solutions, many made conscious decisions to focus on what worked best for them as individuals. By trusting their own experiences and bodily cues, participants resisted the notion that sleep must be perfected or constantly optimised, allowing for a more flexible and self-compassionate approach to rest during pregnancy.

Participants actively engaged in coping strategies to mitigate the impact of sleep disruptions during pregnancy. Some practiced ‘sleep banking’ attempting to rest as much as possible ahead of inevitable sleep interruptions. Others turned to relaxation techniques, such as meditation or breathing exercises, to calm their minds and improve their ability to fall asleep. For example, Sylvie (aged 28, 35 weeks pregnant) mentioned using hypnobirthing and relaxation music as tools to support both her sleep and her preparation for labour:

> "But I have actually also been looking into like hypnobirthing and like breathing exercises and stuff to prepare for labour and have found it really good too. Either fall asleep listening to some tracks, or if I wake up in the night, even just like the playlist that I'm planning to listen to during labour, and you know, like really calming stuff that will get me in the mood” (Sylvie aged 28, 35 weeks pregnant).

Sylvie's (aged 28, 35 weeks pregnant) use of these techniques allowed her to feel more in control of her sleep and to utilise soothing practices that aligned with her personal

needs. In addition to using relaxation methods, participants also engaged in a selective approach to sleep-related advice. Paris (34, 36 weeks pregnant), for example, described how she filtered out information that did not resonate with her:

> "When I read all those stuff, there's awareness of like with the things that we've discussed, the sides of both messages, the fear mongering, so that there's a big awareness about sleep out there in the world through media, through medical professionals, through friends and family. Umm but I feel like I'm a pretty good filter and I mean, it's definitely far from perfect, but I think I'm doing all the things that I know. Umm, so I mean, obviously being psych trained, being well aware of sleep hygiene and so, you know, those sorts of practices as opposed to taking supplements and things like that are definitely part of what I do as well…Basically I'll read something and if it's hooked to me or interests me then I'll find out if it's credible if I'm like meh that's not interesting, or I think that's a crock then I'll just go, mehhh yeah" (Paris 34, 36 weeks pregnant).

Paris' (aged 34, 36 weeks pregnant) filtering approach allowed her to engage with information that felt credible and helpful, while disregarding content that didn't meet her needs, demonstrating a sense of agency in how she approached sleep advice. Sonya (aged 31, 30 weeks pregnant) also indicated a more relaxed engagement with sleep advice, stating, "Like if it came out on my phone, I'd be like, oh, that's interesting, I'd read it because it grabs your attention, but probably wouldn't like worry too much about it, I don't think". This selective disengagement suggests that while participants acknowledged the volume of sleep related information, they were discerning in their engagement with it.

As participants navigated the media's framing of sleep, many actively resisted dominant narratives that portrayed sleep as a perfect or essential aspect of pregnancy. They

questioned the idealised notions of ‘perfect’ sleep and embraced a more flexible approach, emphasising that their personal experiences, needs, and comfort were more important than adhering to societal or media driven expectations. Cassey (aged 34, 33 weeks pregnant) captured this perspective when she said, “Well, what you're doing and a lot of times it is evidence that it's just opinion. So it's kind of like taking everything with a grain of salt”. Cassey’s (ages 34, 33 weeks pregnant) statement reflects scepticism toward external sleep advice, recognising that not all information was equally valuable or applicable to her personal circumstances. This resistance to ‘perfect’ sleep was empowering for many participants, who sought to avoid the anxiety that could arise from trying to meet unrealistic standards.

Perhaps most notably, many participants reclaimed their sense of agency by prioritising their own needs over the external pressures imposed by the media. Rather than trying to adhere strictly to the sleep guidelines or ‘cures’ suggested by external sources, participants focused on what worked best for them individually. By trusting their own experiences and bodily cues, they allowed themselves the freedom to take a more personalised and self-compassionate approach to sleep during pregnancy. Paris (aged 34, 36 weeks pregnant) expressed this shift toward personal agency:

> “Definitely from that societal sort of pressure or norm of this is how we do a day or this is what is expected from humanity. Into actually this is what I need so more personalised as opposed to generalised…it's more of like a psychological benefit of like doing things that society normally wouldn't I guess rate highly like napping, and being OK with doing that. So, you know, like being OK with putting yourself first in that space has been positive” (Paris, aged 34, 36 weeks pregnant).

Paris’ experience demonstrates how resisting societal pressures and prioritising personal rest practices can contribute to a sense of empowerment during pregnancy. Cassey

(aged 34, 33 weeks pregnant) also emphasised the importance of personal choice in sleep management: “So yeah, it's quite alarming, but you just have to choose something that works for you, and it can be trial and error”. This approach, recognising that each pregnancy is different, allowed participants to engage in a process of experimentation with their sleep practices until they found what worked for them.

Emma (aged 22, 27 weeks pregnant) similarly stressed the importance of trusting her own instincts: “Umm, I've kinda just gone with my own, but I’ve taken in the information I've got. But yeah, just mainly making sure I'm not panicking when I'm [sleeping] on my back”. By focusing on her own comfort rather than the external pressure to conform to idealised sleep guidelines, Emma (aged 22, 27 weeks pregnant) felt more at ease with her sleep patterns. Many participants expressed a sense of peace with their sleep limitations, particularly as they adapted to the challenges of pregnancy. Cheyenne (aged 33, 38 weeks pregnant) reflected on how maternity leave allowed her to adapt to her own sleep rhythms:

> “And then actually, since being on maternity leave, although insomnia, it's been… or, you know, I’m awake for a few hours each night or whatever, it's actually been amazing because I can go to sleep and wake up whenever I want. And that just, you know, I can nap during the day. There's no real pressure to be well rested because I can rest whenever I want”.

Cheyenne’s (aged 33, 38 weeks pregnant) acceptance of her sleep limitations and ability to rest when needed demonstrates many participants flexible approach to sleep, which valued personal autonomy over external expectations. Jasmine (aged 29, 22 weeks pregnant) also described her approach to sleep: “I would always enjoy having a nap when I could… just control what you can, so having a good sleep routine like maybe it's going for a walk to wind down beforehand or like reading a book to relax your mind, making sure that your bed is

comfortable and like the sheets are done nicely and even just". Jasmine's (aged 29, 22 weeks pregnant) focus on controlling small aspects of her environment, like her routine and the comfort of her bed, allowed her to adapt to pregnancy's sleep disruptions while still feeling in control of her rest.

Overall, this theme underscores the active and diverse ways pregnant women navigate the complexities of sleep-related information and challenges in the context of pervasive societal and media pressures. By adopting coping strategies such as 'sleep banking,' relaxation techniques, and selective engagement with advice, participants demonstrated resilience and agency in reclaiming control over their sleep experiences. This resistance to idealised, often commercialised, narratives of 'perfect sleep' highlights the importance of flexibility, self-compassion, and individualised care during pregnancy. Such approaches not only mitigate anxiety but also challenge dominant discourses that prioritize normative standards and moral responsibility over lived experience. In a broader sense, these findings point to the need for more nuanced public health messaging and supportive care that acknowledges the variability of pregnancy experiences and validates personal coping mechanisms, rather than perpetuating fear or unrealistic expectations. Emphasising empowerment and trust in one's body may foster better emotional wellbeing and realistic approaches to maternal sleep health in both research and practice.

Discussion

This study explored how pregnant women in AoNZ negotiate and navigate the discourses surrounding sleep as presented in online media. Through reflexive thematic analysis of participant narratives, five interconnected themes were produced, revealing that sleep during pregnancy is far more than a biological or physiological process. Instead, sleep is experienced and understood within a broader social, cultural, and political context that shapes women's perceptions, behaviours, and emotional responses. These themes collectively demonstrate how pregnant women are positioned at the intersection of competing discourses that simultaneously pathologise sleep, framing disruptions as medical problems requiring intervention; commercialise sleep, promoting products and solutions that promise to 'fix' sleep issues; and moralise sleep, imposing expectations of responsible motherhood through vigilant management of rest. Such discourses not only influence how women experience sleep but also contribute to the regulation of maternal bodies, reinforcing societal norms about health, productivity, and maternal duty. This complex interplay underscores the importance of understanding sleep during pregnancy as a culturally embedded phenomenon, shaped by media narratives that impact women's sense of agency, wellbeing, and identity.

Summary of themes

Disrupted sleep and the loss of sleep agency

The first theme captured the pervasive and often involuntary disruptions to sleep experienced during pregnancy, underscoring a profound shift in participants sense of bodily autonomy and control over sleep. While participants acknowledged that physical changes such as pain, foetal movement, and frequent urination were expected aspects of pregnancy, they also expressed a sense of helplessness and frustration. Sleep, previously experienced as reliable and restorative, became fragmented, elusive, and often laden with anticipatory

anxiety. The loss of agency over sleep reflected more than just biological discomfort; it marked a psychological reorientation in how participants related to sleep itself. Beyond the physical disruptions, pregnancy-induced sleep disturbances profoundly alter women's embodied experience and sense of self. Aligning with the concept of biographical disruption (Bury, 1982), pregnancy can unsettle established bodily routines and temporal rhythms, forcing women to renegotiate their identity in relation to a changing body. Feminist phenomenology further emphasises how embodied experiences are socially and culturally mediated, shaping how women inhabit and interpret their bodies during pregnancy (Ahmed, 2006). The loss of sleep agency thus entails more than disrupted rest, it challenges women's agency, implicating broader questions of autonomy within socio-cultural constraints. Emirbayer and Mische's (1998) framework on agency suggests that this loss is dialectical: women are not simply passive but act within structural limits, continually negotiating control and constraint in the context of dominant maternal expectations.

Notably, participants often described a shift from viewing sleep as self-care to seeing it as a preparatory stage for maternal sacrifice or 'practice' for the sleeplessness of early motherhood. This narrative, subtly reinforced by peers and popular discourse, reflects what Kukla (2008) refers to as the 'pre-maternal' subject, where women begin adapting to societal expectations of selflessness long before their child is born. Moreover, the repositioning of sleep within a moral economy of maternal sacrifice begins to align with intensive mothering ideologies that frame the gestational period as a critical window for responsible health behaviours to safeguard foetal development above the mother's own needs (Hays, 1996). Consequently, pregnancy becomes a formative stage in intensive mothering ideology. This further lays the groundwork for heightened maternal surveillance, self-regulation, and internalised guilt or anxiety when ideals are perceived as unmet (Hays,

1996). Within this discourse, the pregnant body becomes a site of heightened surveillance, wherein sleep is treated as a domain of moral responsibility toward the unborn child (Lupton, 2012). The internalisation of these norms can generate a substantial psychological burden, as participants described feelings of guilt and inadequacy when unable to achieve optimal sleep despite their best efforts. In this way, sleep during pregnancy emerges as a contested terrain, where the erosion of sleep agency intersects with gendered expectations of maternal vigilance and self-regulation. This underpins postnatal experiences of exhaustion, self-monitoring, and maternal burnout.

Seeking information and navigating online media content

In response to this disruption, participants actively sought information, turning to online media, social platforms, and healthcare professionals for guidance. However, they were met with often contradictory advice. Particularly concerning were alarmist headlines and conflicting recommendations about sleep positions and their implications for foetal health. This information overload often induced feelings of anxiety rather than clarity.

Yet, participants demonstrated reflexivity, selectively engaging with sources they deemed trustworthy and disengagement with sources which they deemed non credible. This tension between information seeking and emotional protection aligns with the notion of the 'digitally engaged patient' who must act as both researcher and filter in a neoliberal health landscape (Lupton, 2013). Within this paradigm, the pregnant person is cast as both consumer and curator of health knowledge, responsible for managing their own risk through personalised research, often in the absence of clear, authoritative guidance. However, this self-responsibilisation is not without cost. As participants reported, the labour of sifting through conflicting claims, especially around emotionally charged topics such as foetal safety, entailed significant cognitive and affective effort. For some, the constant exposure to worst-case scenarios generated distress, prompting strategic

disengagement or selective avoidance of particular content streams. This interplay between agency and emotional self-protection highlights the inconsistent nature of digital health engagement in pregnancy. While online platforms provide access to real-time peer support, diverse perspectives, and medical expertise, they also function as sites of moral regulation and surveillance, particularly for pregnant women whose behaviours are subject to intense scrutiny (Johnson, 2014). The expectation to 'stay informed' becomes yet another facet of the gendered labour of pregnancy, intertwined with broader discourses of maternal responsibility, risk management, and health optimisation.

In this context, information seeking becomes more than a practical task, it is a deeply affective and morally charged process. Which further reflects the complex terrain of contemporary pregnancy under conditions of biomedicalisation and digital connectivity. As such, health literacy and digital inequalities critically shape pregnant women's ability to navigate conflicting media messages about sleep. According to Norman and Skinner (2006), eHealth literacy varies widely, influencing how effectively individuals find, evaluate, and apply health information. This variation helps explain differential capacities for strategic disengagement observed among participants. Van Deursen and Van Dijk (2014) highlight how unequal access to digital skills and resources can exacerbate anxiety when faced with contradictory advice.

Internalised Pressure and Heightened Responsibility for Sleep Health

A particularly salient theme was the extent to which participants internalised the idea that sleep was not just for their benefit, but crucial for foetal development. Media messages framed poor sleep not as an unfortunate by-product of pregnancy, but as a potential harm to the unborn baby. This framing engendered feelings of guilt, anxiety, and moral pressure among participants when they perceived themselves as falling short of the idealised standards of sleep. Such internalised guilt aligns closely with the concept of

intensive mothering, a socio-cultural discourse identified by Hays (1996), which demands that mothers vigilantly oversee and optimise all aspects of their behaviour to ensure the optimal wellness of their child. Within this framework, maternal labour extends beyond caregiving to encompass constant self-surveillance and self-regulation, making even rest a site of moral accountability (Hays, 1996). Sleep, therefore, is not merely a physiological necessity but is recast as a moral obligation, with lapses in sleep perceived as symbolic of failure to fulfil the ideal of the self-sacrificing, perfect mother (Hays, 1996). This discourse situates pregnant women with heightened responsibility, where the bodily experience of fatigue is fraught with emotional and ethical significance, amplifying stress and potentially compounding sleep disturbances. The pervasive expectation to maintain 'good' sleep thus reflects broader neoliberal imperatives that individualise health management while simultaneously intensifying gendered pressures during pregnancy (Hays, 1996; Lupton, 2013). Despite pregnancy being a time of immense physiological upheaval, where disrupted sleep is common, participants rarely framed these factors as outside of their control. Instead, they expressed shame and frustration for not achieving sleep targets, suggesting an internalisation of public health and media discourses that rarely acknowledge the unpredictable nature of gestational embodiment. The pressure to manage sleep perfectly, despite significant physiological disruption, therefore compounds rather than alleviates the emotional toll of sleep loss. In this way, the ideal of sleep health becomes yet another site of maternal labour and moral burden.

Additionally, Beck's (1992) risk society theory situates pregnancy within a broader sociocultural context in which everyday life is permeated by heightened perceptions of risk and the imperative to manage those risks individually. In a risk society, trust in traditional institutions (such as medicine, science, or religion) becomes increasingly fragmented, and individuals are compelled to take personal responsibility for navigating complex health and

lifestyle choices (Beck, 1992). Within this framework, pregnancy becomes a particularly charged site of risk anxiety, as women are held accountable not only for their own health but for the well-being of the foetus. This intensification of responsibility encourages women to monitor their behaviours with hyper-vigilance, especially when it comes to sleep, where discourses of maternal self-regulation often frame sleeplessness or 'incorrect' sleep as potential threats to the unborn child. Our findings echo this logic, with several participants expressing guilt or worry after encountering alarmist media messages that positioned back-sleeping or insufficient rest as equivalent to endangering their baby. In this way, Beck's (1992) theory illuminates how women internalise both gendered and societal pressures, leading to a heightened sense of surveillance and emotional stress. The burden of risk management is thus not merely physical or behavioural but deeply affective, shaping how pregnant women experience and interpret sleep as a moral responsibility rather than a biological necessity.

Commercialisation of Sleep and the Pressure to Fix Sleep Problems

Adding to the pressure to achieve perfect sleep in pregnancy, was the relentless commercialisation of sleep. Participants reported being inundated with targeted advertisements for pregnancy pillows and sleep aids, all promising solutions to their sleep challenges. These products were framed not as optional comforts, but as necessary tools for good motherhood. The pervasive message was clear that sleep problems were solvable, and it was the pregnant individual's responsibility to purchase the right fix. There was a discernible tension between hope and scepticism, with many participants recognising that the commercial sleep industry exploited their vulnerabilities. The promise of a 'solution' to sleep problems was enticing, especially when participants were exhausted, anxious, and desperate for rest. Yet the commodification of maternal wellness often failed to deliver meaningful relief, instead reinforcing a sense of inadequacy when commercial solutions did

not ‘work’. This dynamic reflects critiques of the broader wellness industry, which often reconfigures structural, physiological, or socially embedded health challenges into solvable consumer problems, masking the complexity of lived experience (McCarthy., et al. 2023). While some participants derived benefit from these items, others felt manipulated noting the high costs and limited effectiveness. This further highlights the commodification of maternal health, where the ‘good’ pregnant woman is not only vigilant but also a savvy consumer. These dynamics echo critiques of the wellness industry’s tendency to individualise and monetise structural health issues (McCarthy et al., 2023).

Williams, et al’s., (2013) exploration of sleep within the context of a 24/7 society offers a critical lens through which to understand the commercialisation and moralisation of sleep evident in our participants’ narratives. Their analysis highlights how sleep is increasingly framed not simply as a biological necessity but as a commodity and a site for individual optimisation, reflecting broader neoliberal discourses of self-management and enterprise. This aligns closely with our findings, where pregnant women described pervasive pressure to ‘fix’ disrupted sleep through consumer products such as pregnancy pillows and sleep aids, underscoring the commodification of maternal wellbeing. Moreover, Williams et al. (2013) discuss the tension between medicalisation and customisation of sleep, where sleep problems are either pathologised or reframed as lifestyle issues open to personal enhancement, which parallels participants’ ambivalence toward media messages that both medicalise their sleep disturbances and encourage self-directed management via commercial solutions. However, while Williams et al. (2013), primarily focus on general adult populations in a neoliberal society, our study reveals how these dynamics are intensified in pregnancy, a uniquely embodied and socially regulated state. Here, the moral imperatives around maternal responsibility and foetal health compound the commercial and medical discourses, generating heightened emotional labour and internalised guilt that may

be less pronounced in non-pregnant populations. Thus, the present findings extend Williams et al., (2013) insights by illustrating how sleep's commodification and moralisation intersect with gendered expectations during pregnancy, reinforcing the need for more nuanced, context-sensitive approaches to maternal sleep health.

In sum, the commercialisation of sleep during pregnancy illustrates a broader neoliberal logic in which health is reimagined as a matter of individual consumption and discipline. It also highlights how maternal embodiment is commodified, with sleeplessness framed not as a symptom of systemic gaps in perinatal care, but as a consumer problem with purchasable solutions. This framing intensifies both the emotional and financial burden of pregnancy, positioning rest as yet another domain in which women are expected to perform idealised motherhood, even before birth.

Coping Strategies and Resistance

Amid these pressures, participants also carved out space for agency, resistance, and self-compassion. Some practiced sleep banking, others used mindfulness, and many deliberately disengaged from advice that provoked anxiety or shame. Several women described trusting their own bodies and experiences over media messages, prioritising comfort over perfection. In doing so, they resisted the pervasive narrative that pregnant sleep must be optimised at all costs. These small acts of resistance demonstrate how individuals reassert control over their embodied experiences in ways that defy the moralising and commercialising discourses surrounding pregnancy (Ahmed, 2014). They reflect what Ahmed (2014) terms 'wilful subjects', those who choose not to comply with dominant expectations of maternal behaviour.

Moreover, these coping strategies highlight the capacity of pregnant women to navigate and negotiate contradictory health messages in ways that protect emotional well-being. Rather than passively absorbing the pressures of the sleep health economy, many

participants filtered and contextualised information based on personal relevance and emotional impact. This selective engagement constitutes what Fullagar and Harrington (2009) describe as a negotiation with health discourses that acknowledges the political and affective dimensions of embodied practice. Within this framework, rejecting harmful advice or prioritising comfort becomes a political act, an intentional effort to safeguard emotional sovereignty in an environment saturated with moralised imperatives.

However, the capacity to resist dominant narratives was not evenly distributed. As some participants noted, their ability to disengage or critique certain messages was supported by prior knowledge, bodily awareness, or access to supportive social networks. These findings underscore that agency is relational and context-dependent, emerging at the intersection of structural pressures and individual capacities. Nonetheless, the presence of these resistant strategies illustrates that pregnant women are not mere recipients of maternal sleep discourses but actively shape and reinterpret them in ways that reclaim space for personal comfort, care, and resistance.

Synthesis

Together, these themes suggest that sleep in pregnancy cannot be understood solely through a biomedical lens. It is a socially situated experience shaped by cultural narratives, economic forces, and gendered expectations. Pregnant women are not only managing their sleep but also navigating complex emotional and informational terrain of digital media. They are expected to be rational decision makers, ideal consumers, and morally responsible mothers while contending with the basic physiological demands of pregnancy and sleep.

This study contributes to an emergent body of critical scholarship that situates sleep not merely as a biological process or health behaviour, but as a profoundly political and affective terrain (Williams et al., 2013). The narratives shared by participants, of disrupted sleep, internalised moral pressure, and resistance, reveal how sleep in pregnancy becomes a

key site through which gendered subjectivities are shaped. Further demonstrating how moral discourses are enacted, and neoliberal health responsibilities are reproduced regarding sleep. Far from being a private phenomenon, sleep emerges here as a medium through which power is both exercised and contested, particularly in the context of maternal embodiment.

Drawing on Foucault's (1978) conceptualisation of biopower, this study highlights how pregnant women are governed through discourses that construct sleep as a form of reproductive responsibility through the media. In this configuration, the maternal body is imagined as a vessel whose behaviours must be continually regulated to ensure optimal foetal outcomes. Sleep becomes a moral imperative, its regulation framed not just as self-care but as an ethical obligation to the unborn child. These dynamics align with governmentality wherein individuals are positioned as responsible health citizens tasked with managing their own risk and optimising their biological processes through ongoing self-surveillance (Rose, 2007). Participants' engagement with pregnancy pillows, their scrutiny of sleep-related headlines, and their guilt over perceived sleep 'failures' reflect a deeply internalised responsibilisation that is emblematic of contemporary biopolitical regimes. Recent theoretical work on digital neoliberalism and platform capitalism situates the commercial and technological mediation of pregnancy sleep within global socio-economic systems that incentivise self-optimisation and datafication (Couldry & Mejias, 2019). This broadens understanding of maternal sleep as embedded within complex networks of power, technology, and capital, underscoring the urgency of critical, intersectional, and contextually sensitive approaches to maternal health.

This responsibilisation is not imposed through coercion, but rather through affective channels, through anxiety, fear, and guilt, which operate as subtle yet powerful mechanisms of governance. The affective dimensions of this labour are significant. Participants in this

study were not simply managing their sleep; they were managing their emotions about sleep often due to pervasive media channels, monitoring their fears about potential harm, negotiating guilt over unmet ideals, and struggling with the mental toll of vigilance. In this way, pregnancy sleep can be understood as a form of affective labour embedded in the broader political economy of health. As Kukla (2008) argues, pregnant bodies are rendered 'public objects' through health and media discourses, subject to moral scrutiny and regulation. The regulation of sleep thus becomes one of many sites in which women's embodied choices are rendered legible to wider systems of social control and moral judgement.

This moralisation of sleep reflects and reproduces what Hays (1996) termed intensive mothering, a dominant cultural ideology that demands women invest extraordinary emotional, physical, and cognitive resources into parenting, even before the child is born. Within this paradigm, even sleep becomes a domain of maternal duty. Yet the demands of intensive mothering, when filtered through the algorithmic and commercial logics of digital media, are no longer solely interpersonal, they are technologically mediated and economically incentivised. Participants' encounters with personalised advertising for pregnancy sleep products, algorithmically tailored news headlines about sleep dangers, and the ceaseless scroll of peer advice on social platforms illustrate what feminist scholars have critiqued as the digital biomedicalisation of health (Clarke et al., 2003; Lupton, 2016). Here, health management is transformed into a neoliberal enterprise of self-optimisation, supported by digital infrastructures that both reflect and reinforce dominant norms of maternal performance and responsibility. Such norms are often underpinned with consumerist incentives to purchase goods.

Importantly, these processes are not experienced uniformly. While many participants in this study demonstrated awareness of the commercial imperatives and

contradictory advice embedded in media content, their capacity to resist or disengage was shaped by access to prior knowledge and supportive social networks. This underscores the relational and situated nature of agency, echoing feminist critiques of neoliberal individualism (Gill, 2007; Ahmed, 2014). Resistance, in this context, was not simply a matter of rejecting dominant narratives; it was often enacted through small, everyday practices such as choosing comfort over idealised sleep positions, ignoring sensationalist headlines, or refusing to invest in sleep products. All acts which carried profound political weight. These acts can be read through Ahmed's (2014) concept of the wilful subject: those who refuse to comply with normative scripts and instead reclaim bodily sovereignty in ways that challenge dominant power structures.

Moreover, the tension between agency and constraint observed in participants' accounts aligns with recent feminist re-theorisations of care and health. Pregnant women were not merely passive recipients of media discourse, nor fully autonomous agents. Instead, they occupied a contradictory position as both subjects of biopolitical regulation and as agents of critique, improvisation, and resistance. Through conceptualising pregnancy sleep as a biopolitical practice and site of moral governance, this study challenges the reductive framing of sleep in public health discourse as an individual behavioural outcome or lifestyle choice. It foregrounds the embeddedness of sleep within wider sociopolitical systems, normative ideologies, and moral economies. In doing so, it contributes to a more nuanced understanding of maternal health, one that is attentive to power, embodiment, and the structural conditions that shape how sleep is navigated and negotiated.

Implications & Applications

This study calls for greater awareness of the media discourses that frame sleep as both a health behaviour and a moral practice. The findings of this study have important implications for health professionals, educators, and those involved in the development of

antenatal resources and sleep related interventions. Sleep in pregnancy, as revealed through participants' narratives, is not merely a physiological phenomenon but a socially and emotionally mediated experience, shaped by media discourse, consumer pressures, and gendered expectations. Accordingly, healthcare providers should be attuned to the broader sociocultural context in which sleep guidance is received and interpreted. Antenatal care practitioners can be encouraged to adopt a more person-centred approach when discussing sleep, to avoid moralising sleep behaviours and acknowledge the complexities of lived experience. Health professionals and educators should critically examine the messaging around pregnancy and sleep, ensuring it supports, rather than overwhelms expectant mothers.

Integrating critical media literacy into antenatal education may further support pregnant women in navigating the often contradictory and overwhelming digital media environment. In addition, designers of digital health tools and commercial sleep products could critically assess the ethical implications of targeting pregnant consumers, ensuring that interventions are grounded in evidence, cultural sensitivity, and psychological wellbeing rather than neoliberal ideals of self-optimisation and commercialisation. By recognising and addressing the social and structural dimensions of sleep, these practical efforts may foster more equitable and compassionate care.

Media outlets, including leading digital platforms in AoNZ such as *Stuff, The Herald, and The Spinoff*, should be encouraged to move beyond sensationalist headline tactics, often employed as clickbait to drive engagement, and instead foster more nuanced, ethical, and supportive narratives around sleep in pregnancy. While attention-grabbing headlines may increase traffic, they risk amplifying anxiety and perpetuating harmful discourses that frame sleep difficulties as personal failings or dire threats to maternal and foetal health. This approach is particularly problematic for first-time mothers, who may be

more vulnerable to internalising such messages. Ethically, media organisations hold a responsibility to avoid fearmongering and instead present evidence-informed, balanced information that acknowledges the complex, embodied nature of sleep during pregnancy. Supportive media coverage can help mitigate stress, validate lived experiences, and empower pregnant women to manage their sleep health with confidence rather than fear. Moreover, future sleep research must move beyond reductionist frameworks that emphasise individual behaviours or biomedical explanations alone. Instead, it should encompass the cultural, emotional, political, and structural factors that shape how sleep is experienced and understood. Recognising that sleep is not solely a matter of personal choice or physiology but is deeply embedded within broader sociocultural narratives. Subsequently, this will allow for more holistic and context-sensitive understandings of sleep, particularly in vulnerable populations such as pregnant women.

Strengths

A key strength of this study is its qualitative and interpretive approach, which enabled rich insights into the lived experiences of first-time pregnant women navigating sleep in a media saturated landscape (Riley & Chamberlain, 2021). Qualitative approaches are effective at uncovering meanings, motivations, and identity work that may be obscured in quantitative research (O'Rourke & Pitt, 2007). Rather than reducing sleep to a biomedical phenomenon, this research foregrounded women's voices, capturing the nuanced ways in which media messages and social expectations intersect during pregnancy. The use of semi-structured interviews allowed participants to share their experiences in their own words, revealing tensions, contradictions, and strategies of resistance that might otherwise be overlooked in quantitative research. Furthermore, the study was underpinned by a critical feminist framework, which supported a reflexive and ethically conscious engagement with participants, through recognising them as knowledge holders rather than subjects (Runswick-

Cole, 2012; Ussher, 2004). The inclusion of reflexive practices, respondent transcript checking, and regular supervisory consultation also enhanced the credibility and rigour of the analysis (Runswick-Cole, 2012). Overall, the study's methodological and epistemological choices positioned it to contribute original and contextually grounded knowledge to the fields of sleep health, pregnancy, and media studies.

Including pregnant women in research represents a significant strength, particularly given their historical exclusion from many scientific studies, especially clinical trials (Van der Zande et al., 2018). This exclusion has often been driven by ethical concerns about foetal risk, yet it has inadvertently led to critical knowledge gaps in understanding the specific needs, risks, and health outcomes of pregnant populations (Van der Zande et al., 2018). As a result, pregnant women have frequently been left without evidence-based guidance tailored to their experiences. By centring pregnant participants in this study, valuable insights about a life stage marked by profound physical, emotional, and social transformation are gained. Subsequently this addresses an under-researched population and also challenges the systemic marginalisation of pregnant women in research agendas (Onwuachi-Saunders et al., 2019). Their inclusion enriches the data with experiential nuance and ensures that health and social care practices can be better informed by those most affected, ultimately advancing understanding and reproductive justice (Onwuachi-Saunders et al., 2019).

While the sample primarily consisted of participants in their third trimester of pregnancy, with the exception of one participant in the second trimester, this demographic provided several advantages for the aims of this study. Being in the later stages of pregnancy meant that participants had already experienced a wide range of physiological and emotional changes that commonly impact sleep, such as increased physical discomfort, hormonal fluctuations, and heightened anxiety about labour. Importantly, these women had also been pregnant long enough to encounter and reflect on a sustained exposure to sleep-related media

content, health messaging, and public discourse. In contrast, those in the early stages of pregnancy may not yet have encountered significant sleep disruptions or actively sought out information about sleep. Therefore, the predominance of third-trimester participants allowed for richer reflections on how sleep was negotiated over time, how media discourses were internalised or resisted, and how strategies for coping evolved across the pregnancy journey. However, future research might benefit from a more temporally diverse sample to trace how these experiences and interpretations shift across trimesters, as discussed in the limitation section below.

A further strength of this study is the insider position of myself, the researcher, who was pregnant during the time of the interviewing process. This shared positionality likely contributed to a sense of rapport and trust with participants, facilitating more open and authentic dialogue (Dwyer & Buckle, 2009). Insider researchers often possess a deeper, more nuanced understanding of the cultural and embodied experiences they are studying, which can enrich the data collected and the sensitivity with which it is interpreted (Asselin, 2003). In the context of pregnancy, a time often marked by vulnerability, uncertainty, and bodily change, participants may have felt more comfortable sharing their experiences with someone they perceived as similarly situated. This dynamic allowed for a richer co-construction of meaning during interviews. However, while this positionality afforded unique insights and rapport with participants, it also introduces a potential limitation, as addressed in the subsequent section.

Limitations

While this study offers valuable insights into pregnant women's experiences of sleep, several limitations must be acknowledged. Firstly, my position as a pregnant woman at the time of data collection shaped both the interview dynamics and the data itself. As an insider researcher, I shared a degree of embodied experience with participants (Berger, 2015).

However, this familiarity also introduced assumptions into the interviews. Several participants appeared to take for granted that I already understood certain aspects of sleep in pregnancy, and sometimes glossed over details or did not elaborate on their experiences as they assumed I already knew. While this insider status enriched the empathetic quality of the interviews, it may have also limited the depth of explanation around commonly shared phenomena, potentially narrowing the analytical lens.

Secondly, although participants offered rich and reflective narratives, their accounts were shaped by the timing of the interview in relation to their stage of pregnancy, emotional state, and evolving sleep experiences. Some participants admitted they were too tired and they had 'baby brain' describing feeling forgetful and unable to articulate their experiences fully. Moreover, the temporal distance from the experience being discussed can influence recall accuracy, and the interview context itself may shape how participants choose to present their stories (Bergen & Labonté, 2020). As such, interviews are not without limitations and may not provide a fully direct or unmediated window into participants lived experiences. It is important to acknowledge that interview data often represents a co-constructed social interaction between researcher and participant, rather than a pure reflection of an individual's immediate internal or intrapsychic state (Riley & Chamberlain, 2021). Participants may consciously or unconsciously tailor their responses due to social desirability, memory biases, or the relational dynamics present in the interview setting (Bergen & Labonté, 2020). These factors suggest that while interviews offer valuable interpretive insight, they capture a mediated version of experience shaped by language, power relations, and the interview environment, which should be considered when interpreting findings (Bergen & Labonté, 2020). However, all human data is inevitably shaped by subjective perspectives, experiences, and interpretive frameworks. Acknowledging these biases does not diminish the value of research, but rather, as Bergen and Labonté (2020) suggest, can facilitate deeper and more

authentic understandings of the phenomena under study.

Thirdly, the sample was self-selecting and primarily composed of women who were already engaged with online pregnancy related content, as they were recruited through Facebook groups. The method of online recruitment has notable limitations, particularly the potential for digital literacy bias. As such, their perspectives may not reflect the experiences of more marginalised or less connected populations, such as those facing language barriers, digital barriers, housing instability, or limited access to resources (Bethlehem, 2010). As a result, first time mothers who lack reliable internet access, are not engaged with social media, or do not have digital access may have been inadvertently excluded from the sample. This exclusion may disproportionately impact individuals from lower socioeconomic backgrounds, who are statistically less likely to have consistent digital access (Anrijs et al., 2023). Consequently, the sample may under-represent the experiences of more marginalised pregnant women, thus limiting the diversity and generalisability of the findings (Anrijs et al., 2023). Future research should consider more inclusive recruitment strategies to ensure broader representation across digital, economic, and social divides.

A further limitation of this study lies in the gestational homogeneity of the participant sample. Most interviewees were in a similar stage of pregnancy, primarily the third trimester, with just one participant in the second trimester, at the time of data collection. While this provided a degree of consistency and allowed for comparative analysis of shared sleep challenges within that timeframe, it may have limited the scope of insight into how sleep is experienced and understood across the broader arc of pregnancy. Sleep is not static during gestation; as outlined in existing biomedical literature, it fluctuates in response to hormonal, physical, and emotional changes that are often trimester-specific (Mindell et al., 2015; Sedov et al., 2018). By focusing predominantly on later pregnancy, the study may have overlooked

some of the unique concerns, uncertainties, or media engagements that arise in early gestation. For example, first encounters with sleep-related advice, the impact of fatigue in early pregnancy, or the role of media in shaping early perceptions of what to expect.

Including participants from a wider range of gestational stages could have yielded richer insights into how sleep is negotiated in relation to evolving bodily experiences and shifting sociocultural discourses. For instance, pregnant women in their first trimester might engage differently with media narratives, particularly in their search for guidance amid the anxieties of early pregnancy and limited public visibility. Conversely, those in late pregnancy may be more attuned to commercialised sleep solutions or moralised discourses surrounding birth preparedness and maternal responsibility. A more temporally diverse sample across pregnancy trimesters, would have also allowed for a comparative analysis of how digital and media content is consumed, interpreted, or resisted over time. As such this may offer a more dynamic understanding of how sleep-related discourses circulate and are embodied throughout the gestational journey.

Furthermore, the sample lacked ethnic and socioeconomic diversity, limiting the generalisability of findings across different cultural and structural contexts. Qualitative research underscores that an under-diverse sample can lead to overgeneralisation, where emerging themes reflect the dominant cultural or socioeconomic experiences, often missing minority voices (Guest et al., 2006). These constraints underscore the necessity for future research to adopt purposive or stratified sampling strategies. By intentionally recruiting participants across a broader range of cultural, economic, and digital access backgrounds, subsequent studies could provide a more holistic and inclusive understanding of how pregnancy, sleep, and media engagement intersect across diverse populations.

Despite these limitations, the study provides meaningful insights into how pregnant

women make sense of sleep in a media saturated and morally charged cultural context. The findings reflect the value of insider perspectives in uncovering the nuanced, everyday negotiations of sleep, responsibility, and resistance during pregnancy.

Future Research

The findings from this study highlight several important avenues for future research. While this study illuminated how pregnant women negotiate their sleep experiences through intertwined personal, cultural, and media-related lenses, further empirical inquiry is necessary to deepen and broaden our understanding of these complex, intersecting influences.

Firstly, future research should prioritise the inclusion of more diverse populations, particularly pregnant women from a wide range of ethnic, socioeconomic, and cultural backgrounds. Sleep experiences do not occur in a social vacuum; rather, they are profoundly shaped by structural inequalities and culturally specific beliefs and practices surrounding rest, motherhood, and bodily autonomy (Grandner, 2019; Paine et al., 2016). Integrating underrepresented voices, including those of Indigenous peoples such as Māori and Pasifika communities in AoNZ, also women facing socioeconomic marginalisation, would contribute to a more nuanced and comprehensive account of how sleep is experienced across diverse contexts. Such an approach would also serve to critically challenge and potentially disrupt dominant normative assumptions embedded within public health messaging and mainstream media discourses that often universalise middle-class, Eurocentric ideals.

Secondly, an extension of this research could involve conducting a detailed media discourse analysis specifically focused on sleep in pregnancy, to be undertaken in parallel with participant interviews. This integrated approach would enable a more granular examination of how sleep during pregnancy is represented and constructed across a variety of digital and traditional media platforms, including parenting websites, social media networks,

commercial advertising, and medical or public health communications. How such representations of sleep across diverse media platforms either align with or diverge from pregnant women's own interpretations and lived experiences may be of interest (Khosravinik, 2014). As such, through coupling discourse analysis with qualitative audience research, future studies could more explicitly trace the pathways through which specific media messages, including those influenced by algorithms, commercial interests, and sensationalist framing, shape women's perceptions and practices around sleep. This would provide critical insight into the role of media ecologies in producing and reinforcing particular sleep norms and anxieties during pregnancy, while also identifying points of resistance and alternative narrative constructions. Together, such research endeavours would enrich the field's understanding of the socio-cultural, economic, and political determinants of sleep in pregnancy, moving beyond individualised biomedical models towards more holistic, intersectional, and culturally responsive frameworks.

Thirdly, future research could build upon this study by adopting a longitudinal design that follows participants across pregnancy trimesters, thereby capturing the dynamic nature of sleep and its discursive framing throughout pregnancy. Such an approach would not only allow researchers to trace how women's relationships with sleep advice, media messaging, and bodily changes evolve, but would also foreground the transitional rhythms of pregnancy as central to the experience of sleep. Additionally, incorporating a more diverse range of participants in early pregnancy could reveal how sleep expectations are initially formed, whether through digital media, antenatal care, or social networks, and how these expectations are either affirmed or disrupted over time. This would enrich understandings of temporality, embodiment, and discursive engagement in ways that a single time-point design cannot. Finally, future studies might consider integrating diaries or digital ethnographic methods to track real-time interactions with sleep-related content and bodily experiences, offering deeper

insight into the affective and temporal dimensions of pregnancy sleep.

Conclusion

This study set out to explore how pregnant women experience, manage, and make sense of sleep within a sociocultural landscape increasingly shaped by digital media discourses. Through a reflexive thematic analysis of individual interviews, five key themes were produced: disrupted sleep and loss of agency; seeking information and navigating media content; internalised responsibility for sleep health; the commercialisation of sleep; and coping strategies and resistance. Collectively, these themes reveal that sleep during pregnancy transcends its biological function, becoming a complex site of emotional labour, cultural negotiation, and moral judgement.

The narratives shared by participants vividly illustrate the complex emotional landscape surrounding sleep in pregnancy. Many women articulated feelings of frustration, anxiety, and guilt linked to disrupted sleep, often internalising societal expectations that frame sleep difficulties as personal failings rather than normative physiological experiences. Yet, these accounts also reveal active resistance, as participants questioned and reinterpreted dominant media messages that emphasised productivity and individual responsibility. The findings illuminate how pregnant women are situated within an often contradictory matrix of messages that simultaneously position sleep as a personal responsibility and a commodified problem requiring market-based solutions. Participants actively engaged with these discourses, at times internalising dominant narratives that emphasise individual accountability, yet also demonstrating agency by resisting and reshaping such messages in ways that affirm their embodied realities and diverse needs. In this sense, sleep emerges as a powerful lens through which broader societal ideals of motherhood, health, and wellbeing are both reproduced and contested. These dynamics underscore the gendered expectations placed on pregnant women, highlighting how

neoliberal and intensive mothering ideologies intersect with health discourses to generate heightened pressures and emotional labour around managing sleep.

This research contributes substantively to the expanding field that conceptualises health-related behaviours not simply as matters of individual choice or physiological necessity, but as practices embedded within layered social meanings, power relations, and structural inequalities (Hays, 1996; Lupton, 2012). Methodologically, this research affirms the value of reflexive, feminist qualitative approaches in challenging dominant biomedical framings that reduce sleep to an individualised health outcome. By centring the voices of pregnant women navigating a culturally mediated terrain of sleep expectations, this study foregrounds the critical importance of listening to lived experience during moments of profound transition and vulnerability. Such an approach challenges dominant biomedical framings of sleep as a discrete health outcome, urging a more holistic understanding that incorporates emotional, cultural, political, and socioeconomic dimensions.

Ultimately, supporting pregnant women's sleep requires moving beyond generic sleep hygiene advice and commercially driven product-based interventions. It necessitates acknowledging the intricate emotional, political, and cultural work that sleep entails, while critically addressing the structural barriers, such as socioeconomic inequities and workplace policies that complicate pregnant women's capacity to achieve restorative sleep. Creating supportive environments where sleep is recognised not as a luxury or moral test but as a fundamental human need is essential for advancing maternal wellbeing. This study thus offers important implications for health communication, prenatal care practices, and policy initiatives that seek to empower pregnant women in ways that respect their diverse experiences and socio-cultural contexts.

Lastly, this research invites a broader reconceptualisation of pregnancy sleep within public health and policy frameworks. The predominant emphasis on individual

responsibility in sleep health perpetuates neoliberal ideals that obscure the social determinants shaping maternal wellbeing. Effective interventions should therefore adopt a multi-level approach that addresses systemic factors such as workplace accommodations, housing stability, access to culturally competent healthcare, and social support networks. Policymakers must recognise that structural inequities, rather than personal failings, often underlie sleep disturbances and health disparities among pregnant populations. Advancing sleep equity entails not only improving clinical guidance but also advocating for social justice measures that alleviate the material and psychosocial burdens facing pregnant women. By situating sleep within these wider contexts, future efforts can promote holistic wellbeing and reproductive justice, ultimately contributing to healthier pregnancies, mothers, and their children. In doing so, sleep may become reframed in the media not as an anxiety-inducing moralistic test, but as a shared resource worthy of protection, care, and collective investment.

References

Ahmed, S. (2014). *Willful Subjects*. Duke University Press. https://doi.org/10.2307/j.ctv1131d51

Amlaner, C. J., & Fuller, P. M. (Eds.). (2009). *Basics of Sleep Guide* (Second Edition ed.). Sleep Research Society.

Asselin, M. E. (2003). Insider research: Issues to consider when doing qualitative research in your own setting. *Journal for Nurses in Staff Development, 19*(2), 99–103. https://doi.org/10.1097/00124645-200303000-00008

Beck, U. (1992). *Risk society: Towards a new modernity*. Sage Publications.

Berry, R., Quan, S., Abreu, A., Bibbs, M., DelRosso, L., & Harding, S. (2020). *The AASM manual for the scoring of sleep and associated events: Rules, terminology and technical specifications* (Version 2.6). American Academy of Sleep Medicine.

Besedovsky, L., Lange, T., & Born, J. (2012). Sleep and immune function. *Pflugers Archiv - European Journal of Physiology, 463*(1), 121–137. https://doi.org/10.1007/s00424-011-1044-0

Breheny, M., Ross, I., Ladyman, C., Signal, L., Dew, K., & Gibson, R. (2023). "It's Just [Complicated] Sleep": Discourses of sleep and aging in the media. The Gerontologist, 63(10), 1591-1601. https://doi.org/10.1093/geront/gnad058

Breheny, M., Ross, I., & Gibson, R. (2025). 'I'm doomed!': audience responses to media reporting on the link between sleep and Alzheimer's disease. *Health promotion international*, *40*(3), daaf100. https://doi.org/10.1093/heapro/daaf100

Brown, R. E., Basheer, R., McKenna, J. T., Strecker, R. E., & McCarley, R. W. (2012). Control of sleep and wakefulness. *Physiological Reviews, 92*(3), 1087–1187. https://doi.org/10.1152/physrev.00032.2011

Bergen, N., & Labonté, R. (2019). "Everything is perfect, and we have no problems":

Detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research, 30*(5), 783–792. https://doi.org/10.1177/1049732319889354

Bethlehem, J. (2010). Selection bias in web surveys. *International Statistical Review, 78*(2), 161–188. https://doi.org/10.1111/j.1751-5823.2010.00112.x

Bury, M. (1982). Chronic illness as biographical disruption. *Sociology of Health & Illness*, 4(2), 167–182. https://doi.org/10.1111/1467-9566.ep11339939

Buysee, D. J. (2014). Sleep health: can we define it? Does it matter? *Sleep, 37*(1), 9-17. https://doi.org/10.5665/sleep.3298

Cappellini, B., Harman, V., Marilli, A., & Parsons, E.. (2019). Intensive mothering in hard times: Foucauldian ethical self-formation and cruel optimism. *Journal of Consumer Culture, 19*(4), 469–492. https://doi.org/10.1177/1469540519872067

Chang, J. J., Pien, G. W., & Duntley, S. P. (2010). *Sleep deprivation during pregnancy and maternal–fetal outcomes: A review. Sleep Medicine Reviews*, *14*(2), 107–114. https://doi.org/10.1016/j.smrv.2009.07.003

Clarke, A. E., Mamo, L., Fishman, J. R., Shim, J. K., & Fosket, J. R. (2003). Biomedicalization: Technoscientific transformations of health, illness, and U.S. biomedicine. *American Sociological Review, 68*(2), 161–194. https://doi.org/10.2307/1519765

Couldry, N., & Mejias, U. A. (2019). *The costs of connection: How data is colonizing human life and appropriating it for capitalism*. Stanford University Press. https://doi.org/10.1515/9781503609754

Dekker, T. (1969). *The Guls Horne-Booke.* Scholar Press.

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods, 8*(1), 54–63. https://doi.org/10.1177/160940690900800105

Diekelmann, S., & Born, J. (2010). The memory function of sleep. *Nature Reviews Neuroscience, 11*(2), 114–126. https://doi.org/10.1038/nrn2762

Ecker, U. K. H., Lewandowsky, S., Chang, E. P., & Pillai, R. (2014). The effects of subtle misinformation in news headlines. *Journal of Experimental Psychology: Applied, 20*(4), 323–335. https://doi.org/10.1037/xap0000028

Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, 103(4), 962–1023. https://doi.org/10.1086/231294

Facco, F. L., Kramer, J., Ho, K. H., Zee, P. C., & Grobman, W. A. (2010). Sleep disturbances in pregnancy. *Obstetrics & Gynecology, 115*(1), 77–83. https://doi.org/10.1097/AOG.0b013e3181cbd89b

Foucault, M. (1978). *The history of sexuality, Volume 1: An introduction* (R. Hurley, Trans.). Vintage.

Fullagar, S. P., & Harrington, M. (2009). Negotiating the policy imperative to be healthy: Australian family repertoires of risk, leisure and healthy lifestyles. *Annals of Leisure Research, 12*(2), 151–171. https://doi.org/10.1080/11745398.2009.9686818

Gibson, R., Breheny, M., Thompson, A., Signal, L., Haami, D., & Dew, K. (2024). P020 Spinning sleep: Constructions of sleep in New Zealand's online magazine texts. *Sleep Advances*, 5, A36-A36. https://doi.org/10.1093/sleepadvances/zpae070.102

Gill, R. (2007). *Postfeminist media culture: Elements of a sensibility*. European Journal of Cultural Studies, 10(2), 147–166. https://doi.org/10.1177/1367549407075898

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. https://doi.org/10.1177/1525822X05279903

Hallstein, D. L. O. B. (2006). Conceiving intensive mothering. *Journal of the Motherhood Initiative for Research and Community Involvement*.

Haraway, D. J. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies, 14*(3), 575–599. https://doi.org/10.2307/3178066

Harcup, T., & O'Neill, D. (2017). What is news? News values revisited (again). *Journalism Studies, 18*(12), 1470–1488. https://doi.org/10.1080/1461670X.2016.1150193

Harding, S. (1987). *Feminism and methodology: Social science issues*. Indiana University Press.

Hays, S. (1996). The cultural contradictions of motherhood. *Contemporary Sociology*, *26*(4), 484. https://doi.org/10.2307/2655113

Hesse-Biber, S. N. (2014). *Feminist research practice: A primer* (2nd ed.). SAGE Publications.

Howson, A. (2013). Pregnancy, birth and risk: An introduction. *Health, Risk & Society*, 15(1), 1–6. https://doi.org/10.1080/13698575.2013.876191

Hudson, M. (2010). Te Ara Tika: Guidelines for māori research ethics: A framework for researchers and Ethics Committee members. *Health Research Council of New Zealand on behalf of the Pūtaiora Writing Group*.

Irwin, M. R. (2015). Why sleep is important for health: a psychoneuroimmunology perspective. *Annu Rev Psychol, 66,* 143-172. https://doi.org/10.1146/annurev-psych-010213-115205

Johnson, S. A. (2014). 'Maternal devices', social media and the self-management of pregnancy, mothering and child health. *Societies, 4*(2), 330–350. https://doi.org/10.3390/soc4020330

Kadam R. A. (2017). Informed consent process: A step further towards making it meaningful! *Perspectives in clinical research, 8*(3), 107–112. https://doi.org/10.4103/picr.PICR_147_16

Khosravinik, M. (2014). Critical discourse analysis, power, and new media (digital) discourse. In R. Taiwo, A. Odebunmi, & A. Adetunji (Eds.), *Why discourse matters: Negotiating identity in the mediatized world*, 283–301.

Kyle, S. D., & Henry, A. L.. (2017). Sleep is a modifiable determinant of health: Implications and opportunities for health psychology. *British Journal of Health Psychology, 22*(4), 661–670. https://doi.org/10.1111/bjhp.12251

Kukla, R. (2008). Measuring Mothering. *International Journal of Feminist Approaches to Bioethics*, *1*(1), 67–90. http://www.jstor.org/stable/40339213

Kumar, V. M. (2008). Sleep and sleep disorders. I*ndian Journal of Chest Diseases and Allied Sciences, 50*(1), 129.

Ladyman, C., & Signal, T. L. (2018). Sleep Health in Pregnancy: A Scoping Review. *Sleep Med Clin, 13(*3), 307-333. https://doi.org/10.1016/j.jsmc.2018.04.004

Ladyman, C., Signal, T. L., Sweeney, B., Gander, P., Paine, S. J., & Huthwaite, M. (2020). A pilot longitudinal sleep education intervention from early pregnancy and its effect on optimising sleep and minimising depressive symptoms. *Sleep Health, 6*(6), 778-786. https://doi.org/10.1016/j.sleh.2020.05.001

Ladyman, C., Signal, T. L., Sweeney, B., Jefferies, M., Gander, P., Paine, S. J., & Huthwaite, M. (2021). Multiple dimensions of sleep are consistently associated with chronically elevated depressive symptoms from late pregnancy to 3 years postnatal in Indigenous and non-Indigenous New Zealand women. *Aust N Z J Psychiatry, 55*(7), 687-698. https://doi.org/10.1177/0004867420972762

Ladyman, C., Sweeney, B., Sharkey, K., Bei, B., Wright, T., Mooney, H., Huthwaite, M., Cunningham, C., Firestone, R., & Signal, T. L. (2022). A scoping review of non-pharmacological perinatal interventions impacting maternal sleep and maternal mental health. *BMC Pregnancy Childbirth, 22*(1), 659.

https://doi.org/10.1186/s12884-022-04844-3

Lee, K. A., & Gay, C. L. (2004). Sleep in late pregnancy predicts length of labor and type of delivery. *American Journal of Obstetrics and Gynecology*, *191*(6), 2041–2046. https://doi.org/10.1016/j.ajog.2004.05.086

Livingstone, S. (2004). The challenge of changing audiences: Or, what is the audience researcher to do in the age of the internet? *European Journal of Communication, 19*(1), 75–86. https://doi.org/10.1177/0267323104040695

Lupton, D. (2012). 'Precious cargo': Foetal subjects, risk and reproductive citizenship. *Critical Public Health, 22*(3), 329–340. https://doi.org/10.1080/09581596.2012.657612

Lupton, D. (2013) The digitally engaged patient: Self-monitoring and self-care in the digital health era. *Soc Theory Health 11*, 256–270 . https://doi.org/10.1057/sth.2013.10

Lupton, D. (2016). *The quantified self: A sociology of self-tracking*. Polity Press.

Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2015). Does sample size matter in qualitative research? A review of qualitative interviews in IS research. *Journal of Computer Information Systems, 54*(1), 11–22. https://doi.org/10.1080/08874417.2013.11645667

Massey University Te Kunenga Ki Pūrehuroa: *Code of ethical conduct for research, teaching and evaluations*. (2017). Retrieved May 10, 2023, from https://www.massey.ac.nz/massey/fms/PolicyGuide/Documents/c/code-of-ethical-conduct-for-research,-teaching-and-evaluations-involving-human-participants.pdf

McCarthy, S., et al. (2023). "Women and the commercial determinants of health." *Health Promotion International 38*(4).

Norman, C. D., & Skinner, H. A. (2006). eHealth literacy: Essential skills for consumer

health in a networked world. *Journal of Medical Internet Research*, 8(2), e9. https://doi.org/10.2196/jmir.8.2.e9

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1–13. https://doi.org/10.1177/1609406917733847

Onwuachi-Saunders, C., Dang, Q. P., & Murray, J. (2019). Reproductive rights, reproductive justice: Redefining challenges to create optimal health for all women. *Journal of Healthcare, Science and the Humanities, 9*(1), 19–31. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9930478

Okun, M. L., Roberts, J. M., Marsland, A. L., & Hall, M. (2009). *How disturbed is insomnia? Sleep and risk for preterm birth. Sleep, 32*(2), 191–197. https://doi.org/10.1093/sleep/32.2.191

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in Qualitative Research: Amee guide no. 149. *Medical Teacher,* 1–11. https://doi.org/10.1080/0142159x.2022.2057287

O'Rourke, B.K. & Pitt, M. (2007). Using the Technology of the Confessional as an Analytical Resource: Four Analytical Stances Towards Research Interviews in Discourse Analysis. *FQS*, *8*(2), article 3

Paine, S. J., Harris, R., Cormack, D., & Stanley, J. (2016). Racial Discrimination and Ethnic Disparities in Sleep Disturbance: the 2002/03 New Zealand Health Survey. *Sleep, 39*(2), 477-485. https://doi.org/10.5665/sleep.5468

Parton, C., Ussher, J. M., & Perz, J. (2022). Mothers' experiences of wellbeing and coping while living with rheumatoid arthritis: A qualitative study. *BMC Women's Health* 22, 185. https://doi.org/10.21203/rs.3.rs-690060/v1

Riley, S., & Chamberlain, K. (2021). Designing qualitative research in psychology. *The*

SAGE Handbook of Qualitative Research Design, 1113–1128. https://doi.org/10.4135/9781529770278.n68

Riley, S. & LaMarre, A. (2022). Developments in qualitative inquiry. In McCullen, M. (Ed.) *APA Handbook of Research Methods in Psychology*. Second edition.

Rose, N. (2007). *The politics of life itself: Biomedicine, power, and subjectivity in the twenty-first century*. Princeton University Press. https://doi.org/10.1515/9781400827503

Ross, I., Signal, L., Tassell-Matamua, N., Meadows, R., & Gibson, R.. (2024). Sleep as a social and cultural practice in Aotearoa: a scoping review. *Kōtuitui: New Zealand Journal of Social Sciences Online*, 1–30. https://doi.org/10.1080/1177083x.2024.2403654

Runswick-Cole, K. (2012). Interviewing. In Banister, P. et al, *Qualitative methods in psychology*. McGrawHill.

Sanders, C. K., & Scanlon, E. (2021). The Digital Divide Is a Human Rights Issue: Advancing Social Inclusion Through Social Work Advocacy. *Journal of human rights and social work, 6*(2), 130–143. https://doi.org/10.1007/s41134-020-00147-9

Santiago, J. R., Nolledo, M. S., Kinzler, W., & Santiago, T. V. (2001). Sleep and sleep disorders in pregnancy. *Annals of Internal Medicine*, *134*(5), 396. https://doi.org/10.7326/0003-4819-134-5-200103060-00012

Salarvand, S., Mousavi, M. S., Esmaeilbeigy, D., Changaee, F., & Almasian, M. (2020). The Perceived Health Needs of Primiparous Mothers Referring to Primary Health Care Centers: A Qualitative Study. *International journal of women's health*, *12*, 745–753. https://doi.org/10.2147/IJWH.S258446

Sedov, I. D., Cameron, E. E., Madigan, S., & Tomfohr-Madsen, L. M. (2018). Sleep quality during pregnancy: A meta-analysis. *Sleep Medicine Reviews*, *38*, 168–176.

https://doi.org/10.1016/j.smrv.2017.06.005

Siegel, J. M. (2009). Sleep viewed as a state of adaptive inactivity. *Nature Reviews Neuroscience, 10*(10), 747–753. https://doi.org/10.1038/nrn2697

Signal, T. L., Paine, S. J., Sweeney, B., Priston, M., Muller, D., Smith, A., Lee, K. A., Huthwaite, M., Reid, P., & Gander, P. (2014). Prevalence of abnormal sleep duration and excessive daytime sleepiness in pregnancy and the role of socio-demographic factors: comparing pregnant women with women in the general population. *Sleep Med, 15*(12), 1477-1483. https://doi.org/10.1016/j.sleep.2014.07.007

Signal, T. L., Sweeney, B. M., Muller, D. P., Ladyman, C. I., Wu, L., & Paine, S.-J. (2022). Moe Kura: a longitudinal study of mother and child sleep and well-being in Aotearoa New Zealand. *Journal of the Royal Society of New Zealand, 52*(3), 283-300. https://doi.org/10.1080/03036758.2022.2051569

Sikka, T. (2021). The neoliberalization of sleep. TSANTSA – *Journal of the Swiss Anthropological Association, 26*, 105–121. https://doi.org/10.36950/tsantsa.2021.26.6935

Silva-Pérez, L. J., González-Cardenas, N., Surani, S., Etindele Sosso, F., & Surani, S. R. (2019). Socioeconomic status in pregnant women and sleep quality during pregnancy: A systematic review. *Cureus, 11*(11), e6183. https://doi.org/10.7759/cureus.6183

Spiegel, K., Tasali, E., Leproult, R., & Van Cauter, E. (2009). Effects of poor and short sleep on glucose metabolism and obesity risk. *Nature Reviews Endocrinology, 5*(5), 253–261. https://doi.org/10.1038/nrendo.2009.23

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. SAGE.

Su, P., & He, M. (2023). Relationship between sleep quality and subjective well-being: resilience as a mediator and belief in a just world as a moderator. *Frontiers in psychiatry*, *14*, 1297256. https://doi.org/10.3389/fpsyt.2023.1297256

Sullivan, S. S., Carskadon, M. A., Dement, W. C., & Jackson, C. J. (2022). Normal human sleep: An overview. In M. H. Kryger, T. Roth, & C. A. Goldstein (Eds.), *Principles and practice of sleep medicine* (7 ed.). Elsevier.

Tononi, G., & Cirelli, C. (2014). Sleep and the price of plasticity: From synaptic and cellular homeostasis to memory consolidation and integration. *Neuron, 81*(1), 12–34. https://doi.org/10.1016/j.neuron.2013.12.025

Ussher, J. M. (2004). Reconceptualising reproductive disorders: The development of a material-discursive-intrapsychic approach. *In Proceedings of the 14th international conference of psychosomatic obstetrics and gynaecology* (pp. 16-19).

Van der Zande, I. S. E., Van der Graaf, R., Hooft, L., & Van Delden, J. J. M. (2018). Facilitators and barriers to pregnant women's participation in research: A systematic review. *Women and Birth, 31*(5), 350–361. https://doi.org/10.1016/j.wombi.2017.12.009

Van Deursen, A. J., & van Dijk, J. A. (2014). The digital divide shifts to differences in usage. *New Media & Society*, 16(3), 507–526. https://doi.org/10.1177/1461444813487959

Walker, M. (2017). *Why we sleep: Unlocking the power of sleep and dreams*. Scribner.

Wigginton, B., & Lafrance, M. N. (2019). Learning critical feminist research: A brief introduction to feminist epistemologies and methodologies. *Feminism & Psychology,* 095935351986605. https://doi.org/10.1177/09593535198

Williams, S. J., Seale, C., Boden, S., Lowe, P., & Steinberg, D. L. (2008). Medicalization and beyond: The social construction of insomnia and snoring in the news. Health,

12(2), 251-268. https://doi.org/10.1177/1363459307086846

Williams, S. (2011). *The politics of sleep: Governing (un) consciousness in the late modern age.* Springer.

Williams, S. J., Coveney, C. M., & Gabe, J. (2013). Medicalisation or customisation? Sleep, enterprise and enhancement in the 24/7 society. *Social Science & Medicine, 79*, 36–43. https://doi.org/10.1016/j.socscimed.2012.06.024

Xie, L., Kang, H., Xu, Q., Chen, M. J., Liao, Y., Thiyagarajan, M., ... & Nedergaard, M. (2013). Sleep drives metabolite clearance from the adult brain. *Science, 342*(6156), 373–377. https://doi.org/10.1126/science.1241224

Zarhin, D. (2023). Sleep as a familial and communal matter: a qualitative study of social norms around sleep health in Israel. *BMC Public Health, 23*(1), 2080. https://doi.org/10.1186/s12889-023-17003-w

Appendices

Appendix A - Recruitment Poster

TE KUNENGA KI PŪREHUROA | MASSEY UNIVERSITY
UNIVERSITY OF NEW ZEALAND

Appendix B - Sleep in the media article headlines shown to participants

Article 1

NZ NEWS QUIZZES SPORT WORLD LISTEN

Poor sleep a danger to pregnancy

MICHELLE DUFF

October 23, 2013, • 11:24am

Article 2

Pregnant women study: Sleeping on your back 'same as smoking 10 cigarettes a day', study finds

By Emma Russell

3 Oct, 2019 12:16 PM · 4 mins to read

Women who sleep on their back during their final weeks of pregnancy are likely to have a baby with a lower birth weight - equivalent to the effect of smoking 10 cigarettes a day.

That's according to a University of Auckland-led study involving 1760 pregnant women from New Zealand, Australia and the United Kingdom who were interviewed from 28 weeks gestation.

The international research, funded by Cure Kids New Zealand and Red Nose Australia, found women sleeping on their back in the last one to four weeks of pregnancy were three times more likely to have a small for their gestational age (SGA) baby, which was 144g lighter than the average.

READ MORE

- Two unborn babies die after mothers catch measles during pregnancy
- Pregnancy photos reveal bone movement during labour and childbirth
- The risk facing pregnant women
- Eight myths about pregnancy you need to know

https://www.nzherald.co.nz/nz/pregnant-women-study-sleeping-on-your-back-same-as-smoking-10-cigarettes-a-day-study-finds/TOLA6TCWAOCI422JDKALTCTZP4/ 1/4

Appendix C - Interview Guide

Exploring the influence of media messaging on sleep during pregnancy

Interview guide

Preamble

Before we start the interview today, I have a few things that I'd like to go over with you. This interview is about the kind of messages you have seen concerning sleep and pregnancy in the media. Specifically, I am interested in the type of messages you are aware of in the media, where you see them, and how they may influence your own sleep related behaviour or beliefs.

During the interview I will show you some examples of media headlines around different aspects of sleep and pregnancy, and you are welcome to share some of your own if you like. The purpose of this interview is to gauge your experiences and the messaging you are aware of, so the idea is to have more of a conversation to hear about your experiences.

If you start feeling uncomfortable at any point, you are free to stop this interview, we can also pause, or take a break. You also do not have to answer a question if you do not wish to. Everything we talk about today is confidential, and any names or other identifying information will be removed from the transcripts one week post completion. Only the researchers who are part of the project have access to the information that you provide.

Do you have any other questions before we start?
Do you have any cultural considerations, and would you like me to open and close with a karakia?
Is it okay to start recording now?

Aims of the interview

- To understand if you are aware of the key sleep health messages in pregnancy.
- To explore where and how you access information about your sleep.
- To understand if these messages influence your sleep behaviours and beliefs.

Opening questions about your pregnancy:

1. How many weeks into your pregnancy are you?
2. How old are you?

Questions about sleep in pregnancy:

3. Can you describe what a typical day/night of sleep looks like for you in your pregnancy?

Prompts:

- *How do you perceive the role of sleep during pregnancy compared to other stages of life?*
- *Have your sleep patterns and experiences changed as your pregnancy has progressed?*
- *How do you feel about your sleep during pregnancy? (e.g quality, quantity)*

Questions about media influence on sleep perception:

3. How do you think media representations of sleep during pregnancy influence your expectations about sleep during your own pregnancy, if at all?

Prompts:

- *Provide printed article headlines which sensationalise sleep in pregnancy from The Spinoff/Stuff.*
- *Do the articles you have read/printed headlines shown elicit any emotions or feelings? E.g. Sadness/guilt/happiness/worry/relief*
- *Have you encountered any media messages about sleep during your pregnancy, and if so, how have they influenced your perceptions or sleep behaviours?*

Questions about navigating media messages:

4. How do you navigate conflicting or overwhelming media messages about sleep during pregnancy?

Prompts:

- *Do you actively seek out information about sleep during pregnancy from media sources?*
- *Have you noticed any specific trends or patterns in media representations of sleep during pregnancy?*
- *Do you feel that the NZ media portrayals of sleep during pregnancy accurately reflect your own experiences of sleep during this time?*
- *Have you made any changes to your sleep habits based on the information or advice you have encountered in the media?*
- *Are there any other ways you get information about your sleep? E.g. where a smartwatch or use*
- *any apps…is this information helpful? Or from friends and family… - is this more credible than media messages...?*

Questions regarding a critical reflection of media messages:

5. Do you consider the source or the credibility of media messages about sleep during pregnancy?

- *Have you encountered any media representations that have challenged or contradicted your previous beliefs or cultural values about sleep during pregnancy?*

Questions about coping strategies:

6. What emotions do you feel from reading media messages about sleep during pregnancy, compared to the reality of your experience of sleep throughout your pregnancy?

Prompts:

- *Do you engage in discussion with other pregnant individuals or seek out alternative sources of information to balance media portrayals of sleep?*

- *How do you maintain a sense of agency and autonomy in making decisions regarding your sleep during pregnancy?*
- *Are there any positives that you have experienced regarding sleep in your pregnancy?*

Questions regarding personal experiences

7. Reflecting on your own experiences, how do you perceive the relationship between media messages and your sleep practices during pregnancy?

Prompts:

- *Have you encountered any media representations of pregnancy sleep which resonated with your own experiences?*
- *Any positive influences?*
- *Do you feel that the media portrayals accurately capture the challenges, complexities, and positives of sleep during pregnancy?*

Closing thoughts:

8. Is there anything that we have not covered that you would like to add?

Debrief – Thanks, closing karakia, and koha

Appendix D - Ethical Approval

Gmail A T <[redacted]>

[HE014] - Human Ethics Application OM1 24/06 Approved

humanethics@massey.ac.nz <humanethics@massey.ac.nz>
To: [redacted], R.Gibson@massey.ac.nz, T.L.Signal@massey.ac.nz 30 April 2024 at 13:23
Cc: humanethics@massey.ac.nz

Link to the application

HoU Review Group:

ReviewerGroup:
Dr Rosie Gibson and Prof Leigh Signal
Researcher: Ally Thompson
Project Title: Exploring the influence of media messaging on sleep during pregnancy
Dear Ally,

Thank you for the above application that was considered by the Massey University Ohu Matatika 1 at their meeting held on 30/04/2024.

On behalf of the Committee I am pleased to advise you that ethical approval has been granted for your research.

Approval is valid for three years. If this project has not been completed within three years from the date of this letter, an amendment to extend the approval must be requested by contacting the Research Ethics Office at humanethics@massey.ac.nz.

If the nature, content, location, procedures or personnel of your approved application change, please contact the Research Ethics Office at humanethics@massey.ac.nz to request an amendment form.
If you wish to print an official copy of this letter:

1. Please login to the RIMS system (https://rme.massey.ac.nz).
2. In the Ethics menu, select Ethics Applications.
3. Using the Advanced option, select Ethics Applications (Area), Application ID (Search On), enter the ethics notification number in the Value area and select Find on the toolbar.
4. With the application the Results Tab, tick the empty box on the far left of the application and select Reports from the toolbar.
5. Select the "Human Ethics - Full Application Notification Letter" link, this will open the report viewer.
6. Select the application code from the Report Parameters dropdown and submit. You can then select an export option from the top toolbar (Print, Save).

Yours sincerely

Professor Tracy Riley
Acting Chair, Research Ethics Chairs' Committee

Massey University Human Ethics Committees
Ohu Matatika 1 (formerly Human Ethics Southern A Committee)
Ohu Matatika 2 (formerly Human Ethics Northern Committee)
Ohu Matatika 3 (formerly Human Ethics Southern B Committee)

Appendix E - Participant information sheet

Exploring the influence of media messaging on sleep during pregnancy

Information Sheet for Interview Participants

This project has been reviewed and approved by the Massey University Human Ethics Ohu Matatika 1, Application OM1 24/06. If you have any concerns about the conduct of this research, please contact the Chairperson, Massey University Human Ethics Ohu Matatika 1, email humanethics1@massey.ac.nz.

Who are we?

- My name is Alice Thompson, I am conducting my, Master's research at the School of Psychology, Massey University. I am part of a larger team exploring the media representation of sleep including Dr Rosie Gibson and Professor Leigh Signal.

What is the aim of the project?

This project will explore people's experiences of sleep during pregnancy, and how these might be influenced or impacted by messages in the Aotearoa/NZ media.

Your participation will create greater understanding of how pregnant people experience sleep and navigate media messages in an Aotearoa/NZ context.

The findings from this study will enable researchers to better understand the lived sleep experiences of pregnant people and how or how not the media may shape these.

You are invited to take part in an interview over zoom. If you are interested, please consider the information below. You may want to talk about the study with other people, such as family, whānau, or friends. You are welcome to bring a support person to the interview. You can also contact me or another member of the team if you have any questions (details below) before agreeing to take part. You are under no obligation to take part and your decision will not impact your antenatal care in anyway.

Who can take part?

- If you are currently pregnant with your first child & also over 18 years of age.

What will happen if I take part?

- Before we schedule a time for you to take part in an interview, **you will be asked to sign a consent form.**
- **Interview times will be scheduled** April – June at a time which suits you.
- **Interviews will last about one hour**, which will include time for introductions, briefing, and debriefing.
- **During the interview** you will be asked to share your knowledge of key sleep-health messages for pregnancy and if these messages influence your sleep practices. The interviewer will have some example content for discussion as well a list of general questions, but you do not have to answer everything. Equally, you can add information of your own.

What are the possible benefits and risks in participating?

Taking part in an interview is voluntary. If you decide to participate, you will be contributing to a better understanding of pregnant people's sleep in Aotearoa New Zealand and could contribute to your own learning about sleep. It will also be valuable in informing appropriate approaches to antenatal/maternal sleep research, resources, and health promotion.
You may find some of the topics of a personal or sensitive nature (e.g. discussing sleep-related behaviours). You are not obliged to answer all questions if you do not feel comfortable. Interviews will be conducted by myself (Alice Thompson) with the support of my supervisors (Rosie Gibson & Leigh Signal). To compensate you for your time, we will provide you with a $30 gift voucher.

Should you experience any emotional distress or wish to speak with someone in a supportive, confidential setting as a result of your participation in this research, the following professional services are available to assist you:

Lifeline Aotearoa – 0800 543 354

1737 – Need to Talk? – Call or text 1737 to connect with a trained counsellor

You are under no obligation to accept this invitation. If you decide to participate you have the right to:

- decline to answer any particular question;
- ask for the recorder to be turned off at any time during the interview;
- withdraw from the study (before, during, or after the interview and within 2 weeks of returning the transcript for editing);
- ask questions about the study at any time during participation;

- provide information on the understanding that your name will not be used in the outputs;
- be given access to a summary of the project findings when it is concluded

What will happen to your information?
All of your information will be kept strictly confidential and any identifying information will be removed after 1 week following completion of interviews. Interviews will be digitally recorded, and audio recordings will be transcribed. You can opt to edit your transcript if you wish within the first week post interview completion. A summary of the findings will be available to you. Summaries will also be presented at conferences as well as published in a scientific journal. All digital information will be stored under password protection only accessible by the researchers managing and analysing the data. All paper information will be stored in a locked filing cabinet at Massey University. The consent forms will be stored separately from the other data in order to preserve confidentiality and protect identity. All data will be destroyed five years after collection.

Thank you for taking the time to consider being involved in this research.
Please take the time to consider this research. If you are interested in participating, please contact me to find out more about interviews.

Kind regards,

Alice Thompson (Researcher)

Email:

Research Team

Dr Rosie Gibson: Supervisor, School of Psychology, Massey University, Palmerston North, New Zealand

Professor Leigh Signal: Supervisor, School of Health, Massey University, Wellington, New Zealand

Appendix F - Consent Form

TE KUNENGA KI PŪREHUROA | MASSEY UNIVERSITY
UNIVERSITY OF NEW ZEALAND

Alice Thompson

School of Psychology

Massey University, Wellington

Email: [redacted]@massey.ac.nz

Participant Consent Form

Exploring the influence of media messaging on sleep during pregnancy

I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary and that I may withdraw from the study (within two weeks of returning the transcript for editing).

	Please tick Yes	No
1) I agree to participate in this study under the conditions set out in the Information Sheet		
2) I agree to the interview being sound recorded		
3) I wish to have a copy of the recording		
4) I wish to have a copy of transcript to review		
5) I understand that participation in this study is confidential. Direct quotes may be used, but no material which could identify me or my family will be used in any reports		
6) I wish to receive a summary of the results from the study		

Declaration by Participant

I_____herby consent to take part in this study.

Signature: _____ **Date:** _____

If you ticked 'yes' to items 3,4 and/or 6 please provide your contact details below

Address:

Email:

Phone Number: